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EXPERIENCE AND NATURE

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PUBLISHED ON THE FOUNDATION
ESTABLISHED IN MEMORY OF
PAUL CARUS
EDITOR OF THE OPEN COURT AND THE MONIST
1888-1919

EXPERIENCE AND NATURE

BY

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Lectures upon the Paul Carus Foundation

FIRST SERIES

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THE PAUL CARUS FOUNDATION

Dr. Paul Carus was born in Ilsenburg, Germany, in 1852. He was educated at the Universities of Strassburg and Tübingen, from the latter of which he received the doctorate of philosophy in 1876. It was, however, in the United States, to which he shortly after removed, that his life-work was performed. He became editor of the *Open Court* in 1888, and later established *The Monist*, remaining throughout his career, editor of these two periodicals and Director of the editorial policies of the Open Court Company. He died in February, 1919, at La Salle, Illinois.

The primary interests which actuated Dr. Carus's life-work were in the field of philosophy, touching with almost equal weight the two great phases of modern speculative concern represented by the philosophy of science and comparative religion. To each of these he devoted numerous special studies, and to each he gave the influence of the press which he directed. This influence was in no sense narrow or specialistic. Dr. Carus was personally profoundly concerned for the broadening of that understanding in all intellectual fields which he felt must be the foundation of whatever is to be valuable in our future human culture; he saw his philosophy never as a closet pursuit, but always as a quest for the social illumination of mankind, in which his hope of betterment lay. In this interest he combatted prejudice, in religion and science alike, seeking to divest the spirit of truth of all cloaking of formula, and turning with eager and open

eyes in every direction in which there was a suggestion of light and leading—to men and to thought of every complexion and to all levels of active human concern with matters of reflection. Dr. Carus was, in fact, strongly Socratic in disposition: he wished to bring philosophy down from the skies of a too studied abstraction and habituate it to the houses of men's souls and to the rich and changing tides of cultural interests. Certainly so far as America is concerned his service is a signal one. During much of his career he stood almost alone as a philosopher outside academic walls, a living exponent of the fact that philosophy is significant as a force as well as useful as an educational discipline. He looked to the cultivation of philosophy as a frame of mind open to all, lay and professional, who should come to see that social liberty is made secure only where there is growth of a sympathetic public intelligence.

It is with the spirit and intention of Dr. Carus's life-work in mind that his family have established in his memory the Paul Carus Lectures. In the United States, foundations devoted to the cultivation of philosophy are so confined to scholastic institutions that the whole field of philosophic concern tends to assume the slant of an immured and scholastic discipline; and the observer is tempted to say that the greatest gift that can befall philosophic liberalism is one that will cause its followers to forget their professional character. Such a gift, certainly, is more than suggested by a lectureship which comes with no institutional atmosphere to further the free play of the mind upon all phases of life. In the stipulations for the Carus lectures, the themes of the lectures are left without definition, for it is recognized that philosophy is

a spirit of approach rather than a set of problems or theories; and the choice of the lecturers, while it is properly placed in the hands of those who make the study of philosophy their profession, is in no manner limited. The Foundation is free, and it asks of its beneficiaries no other response than the spirit of liberalism.

The conditions governing the lectures are few. They are established as a memorial and are to be called the "Paul Carus Lectures." The lecturers are to be chosen by committees appointed from the Divisions of the American Philosophical Association. The lecturer is recognized by an honorarium of one thousand dollars, and the lectures are to be published by the Open Court Company in a series of volumes, which, it is hoped, as the years pass, will become representative of the finest phases of our speculative thought. It is expected that series of lectures will be delivered biennially, the time and place being set by the committees to whom is delegated the selection of the lecturers. It is more than happy that the first series of the Paul Carus Lectures should have been delivered by John Dewey, for there is no living American philosopher of whom it can more truly be said that his influence is of the type which represents Dr. Carus's ideal.

HARTLEY BURR ALEXANDER.

CHAPTER ONE

Experience and Philosophic Method

As Mr. Ralph Perry has said, experience is a weasel word. Its slipperiness is evident in an inconsistency characteristic of many thinkers. On the one hand they eagerly claim an empirical method; they foreswear the *a priori* and transcendent; they are sensitive to the charge that they employ data unwarranted by experience. On the other hand, they are given to deprecating the conception of experience; experience, it is said, is purely subjective, and whoever takes experience for his subject-matter is logically bound to land in the most secluded of idealisms.

Interesting as the theme is, it is aside from our purpose to account for this contradictory attitude. It may be surmised, however, that those guilty of the contradiction think in two insulated universes of discourse. In adherence to empirical method, they think of experience in terms of the modern development of scientific method; but their idea of experience as a distinctive subject matter is derived from another source—introspective psychology as it was elaborated in the nineteenth century.[1] But we must make a choice. If the identification of experience with purely mental states is correct, then the last thing one should profess is acceptance of empirical method as the scientific road to the understanding of the natural

[1] "Psychological: Consciousness as a process taking place in time." This is the primary definition given in Baldwin's Dictionary of Philosophy and Psychology.

and social world in which we live. And if scientific method is intrinsically empirical, then the subject-matter of experience cannot be what introspective psychologists have told us it is.

Whether or no this suggestion is correct, recognition of the inconsistency is of use in enabling us, writer and reader alike, to trap and hold the slippery idea of experience, whenever it is proposed to set forth the implications of experience for philosophy; especially when, as in this discussion, its implications for a theory of nature, of the world, of the universe, form the issue. And I know of no better way of warning the reader against misconception of this purpose than to remind him that, as he reads the statement, he should interpret "experience" in the sense in which he himself uses the term when he professes to be faithful to the empirical method, not in the sense in which he uses it when he implies that experience is momentary, private and psychical.

There are two avenues of approach to the goal of philosophy. We may begin with experience in gross, experience in its primary and crude forms, and by means of its distinguishing features and its distinctive trends, note something of the constitution of the world which generates and maintains it. Or, we may begin with refined selective products, the most authentic statements of commended methods of science, and work from them back to the primary facts of life. The two methods differ in starting point and direction, but not in objective or eventual content. Those who start with coarse, everyday experience must bear in mind the findings of the most competent knowledge, and those who start from the latter must somehow journey back to the homely facts of daily existsnce.

Each way of approach has its advantages and its dangers. Those who are able to pursue the road of that technical and refined knowledge called science are fortunate. But the history of thought shows how easy it is for them to forget that science is after all an art, a matter of perfected skill in conducting inquiry; while it reveals that those who are not directly engaged in the use of this art readily take science to be something finished, absolute in itself, instead of the result of a certain technique. Consequently "scientific" philosophies have over and over again made the science of their own day the premises of philosophy only to have them undermined by later science. And even when reasonably sure foundations are provided by the science of a period, a philosopher has no guarantee save his own acumen and honesty that he will not employ them in such a way as to get lost on a bypath. Professed scientific philosophers have been wont to employ the remoter and refinished products of science in ways which deny, discount or pervert the obvious and immediate facts of gross experience, unmindful that thereby philosophy itself commits suicide.

On the other hand, the method which sets out with macroscopic experience requires unusual candor and patience. The subject-matter of science, for better or worse, is at least "there;" it is a definite body of facts and principles summed up in books and having a kind of independent external existence. But coarse and vital experience is Protean; a thing of moods and tenses. To seize and report it is the task of an artist as well as of an informed technician. As the history of thought shows, the usual thing, a thing so usual as probably to be in some measure inevitable, is for the philosopher to mix with his reports

of direct experience interpretations of it made by previous thinkers. Too often, indeed, the professed empiricist only substitutes a dialectical development of some notion about experience for an analysis of experience as it is humanly lived.

The philosophy which since the seventeenth century has almost achieved a monopoly of the title "empiricism" strikingly illustrates this danger. Not safely can an "ism" be made out of experience. For any interpretation of experience must perforce simplify; simplifications tend in a particular direction; and the direction may be set by custom which one assumes to be natural simply because it is traditionally congenial. For at least two hundred years many interests, religious, industrial, political, have centered about the status of the individual. Hence the drift in all systems save the classic traditional school, has been to think in ways that make individuality something isolated as well as central. When the notion of experiences is introduced, who is not familiar with the query, uttered with a crushingly triumphant tone, "*Whose* experience?" The implication is that experience is not only always somebody's, but that the peculiar nature of "somebody" infects experience so pervasively that experience is *merely* somebody's and hence of nobody and nothing else.

The dialectical situation which results may be illustrated by a quotation which is selected because it is typical of much contemporary philosophizing. "When I look at a chair, I say I experience it. But what I actually experience is only a very few of the elements that go to make up a chair, namely, that color that belongs to the chair under these particular conditions of light, the shape which the chair displays when viewed from this angle,

tc." The man who has the experience, as distinct from philosopher theorizing about it, would probably say that e experienced the chair most fully not when looking at it ut when meaning to sit down in it, and that he can mean o sit down in it precisely because his experience is *not* mited to color under specific conditions of light, and ngular shape. He would probably say that when he oks at it, instead of experiencing something less than a air he experiences a good deal more than a chair: that e lays hold of a wide spatial context, such as the room here the chair is, and a spread of its history, including ie chair's period, price paid for it, consequences, public s well as personal, which flow from its use as household rniture, and so on.

Such remarks as these prove nothing. But they sug- est how far away from the everyday sense of experience certain kind of philosophic discourse, although nomi- ally experiential, has wandered. Interesting results can e had by developing dialectically such a notion of experi- nce as is contained in the quotation; problems can be ade to emerge which exercise the ingenuity of the theo- zer, and which convince many a student that he gets earer to the reality of experience the further away he ets from all the experience he has ever had. The exer- se would be harmless, were it not finally forgotten that ie conclusions reached have but a dialectical status, eing an elaboration of premises arrived at by technical nalysis from a specialized physiological point of view. onsequently, I would rather take the behavior of the og of Odysseus upon his master's return as an example of ie sort of thing experience is for the philosopher than ust to such statements. A physiologist may for his

special purpose reduce Othello's perception of a handkerchief to simple elements of color under certain conditions of light and shapes seen under certain angular conditions of vision. But the actual experience was charged with history and prophecy; full of love, jealousy and villainy, fulfilling past human relationships and moving fatally to tragic destiny.

The excuse for saying obvious things is that much that now passes for empiricism is but a dialectical elaboration of data taken from physiology, so that it is necessary for any one, who seriously sets out to philosophize empirically, to recall to attention that he is talking about the sort of thing that the unsophisticated man calls experience, the life he has led and undergone in the world of persons and things. Otherwise we get a stencilled stereotype in two dimensions and in black and white instead of the solid and many colored play of activities and sufferings which is the philosopher's real datum.

The way of approach that sets out from that which is closest at hand, instead of from refined products of science, no more signifies beginning with the results of psychological science than it does with those of physical science. Indeed the former material is further away from direct experience than that of physics. It signifies beginning back of any science, with experience in its gross and macroscopic traits. Science will then be of interest as one of the phases of human experience, but intrinsically no more so than magic, myth, politics, painting, poetry and penitentiaries. The domination of men by reverie and desire is as pertinent for the philosophic theory of nature as is mathematical physics; imagination as much to be noted as refined observation. It is a fact of *experience* that some

men, as Santayana has pointed out concerning Shelley, are immune to "experience", retaining intact the attitude of childhood. And for a thoroughgoing empiricist the most transcendental of philosophies is an empirical phenomenon. It may not prove intellectually what its originator supposed it to demonstrate, but it shows something about experience, something possibly of immense value for a subsequent interpretation of nature in the light of experience.

Hence it is that experience is something quite other than "consciousness," that is, that which appears qualitatively and focally at a particular moment. The common man does not need to be told that ignorance is one of the chief features of experience; so are habits skilled and certain in operation so that we abandon ourselves to them without consciousness. Yet ignorance, habit, fatal implication in the remote, are just the things which professed empiricism, with its reduction of experience to states of consciousness, denies to experience. It is important for a theory of experience to know that under certain circumstances men prize the distinct and clearly evident. But it is no more important than it is to know that under other circumstances twilight, the vague, dark and mysterious flourish. Because intellectual crimes have been committed in the name of the subconscious is no reason for refusing to admit that what is not explicitly present makes up a vastly greater part of experience than does the conscious field to which thinkers have so devoted themselves.

When disease or religion or love, or knowledge itself is experienced, forces and potential consequences are implicated that are neither directly present nor logically

implied. They are "in" experience quite as truly as are present discomforts and exaltations. Considering the rôle which anticipation and memory of death have played in human life, from religion to insurance companies, what can be said of a theory which defines experience in such a way that it logically follows that death is never a matter of experience? Experience is no stream, even though the stream of feelings and ideas that flows upon its surface is the part which philosophers love to traverse. Experience includes the enduring banks of natural constitution and acquired habit as well as the stream. The flying moment is sustained by an atmosphere that does not fly, even when it most vibrates.

When we say that experience is one point of approach to an account of the world in which we live, we mean then by experience something at least as wide and deep and full as all history on this earth, a history which, since history does not occur in the void, includes the earth and the physical relatives of man. When we assimilate experience to history rather than to the physiology of sensations, we note that history denotes both objective conditions, forces, events and also the human record and estimate of these events. Similarly experience denotes whatever is experienced, whatever is undergone and tried, and also processes of experiencing. As it is the essence of "history" to have meanings termed both subjective and objective, so with "experience." As William James has said, it is a "double-barrelled" fact.[2] Without sun, moon and stars, mountains and rivers, forests and mines, soil, rain and wind, history would not be. These things are not just external conditions of history and experience; they

[2] Lloyd Morgan, Instinct and Experience, pp. 126–128.

are integral with them. But also without the human attitude and interest, without record and interpretation, these things would not be historical.

There is an obvious retort to this plea to take the conception of experience with the utmost of naiveté and catholicity, as the common man takes it when he experiences illness and prosperity, love, marriage, and death. The objection is that experience is then made so inclusive and varied as to be useless for philosophic purposes. Experience, as we are here told to conceive it, includes just everything and anything, actual or potential, that we think of and talk about. So we might just as well start with everything and anything and drop out the idea and word, "experience." The traditional notion of experience, which has been disowned, may be erroneous. But at least it denotes something specific, differential; something which may be set in contrast with other things and may thus serve as a principle of criticism and estimate. But the whole wide universe of fact and dream, of event, act, desire, fancy and meanings, valid or invalid, can be set in contrast to nothing. And if what has been said is taken literally, "experience" denotes just this wide universe.

Here is indeed a vulnerable spot in experience as a guiding method for philosophy. It is presented to us as a catholic and innocent neutral, free from guile and partisanship. But then unwittingly there is substituted for this free, full, unbiased and pliable companion of us all, a simplified and selected character, which is already pointed in a special direction and loaded with preferred conclusions. So often does this occur, that one does well to exercise a wary scepticism whenever an inquirer insistently

professes that *he* keeps to an empirical method. And when this biased course, (easy to fall into as the history of thought testifies), is avoided, the alternative seems to be everything without discrimination, so that experience ceases to have a meaning.

The objection uncovers the exact meaning of a truly empirical method. For it reveals the fact that experience for philosophy is method, not distinctive subject-matter. And it also reveals the sort of method that philosophy needs. Experience includes dreams, insanity, illness, death, labor, war, confusion, ambiguity, lies and error; it includes transcendental systems as well as empirical ones; magic and superstition as well as science. It includes that bent which keeps one from learning from experience as well as that skill which fastens upon its faint hints. This fact convicts upon sight every philosophy that professes to be empirical and yet assures us that some especial subject-matter is experience and some other not.

The value of experience as method in philosophy is that it compels us to note that *denotation* comes first and last, so that to settle any discussion, to still any doubt, to answer any question, we must go to some thing pointed to, denoted, and find our answer in that thing. As method it has a contrast which it does not possess as subject matter, that with "rationalism," understanding by rationalism method which assumes the primacy and ultimacy of purely logical thought and its findings. There are two kinds of demonstration: that of logical reasoning from premises assumed to possess logical completeness, and that of showing, pointing, coming upon a thing. The latter method is that which the word experience sums up.

generalizes, makes universal and ulterior. To say that the right method is one of pointing and showing, not of meeting intellectual requirements or logical derivation from rational ideas, does not, although it is non-rational, imply a preference for irrationality. For one of the things that is pointed out, found and shown, is deduction, and the logic that governs it. But these things have also to be found and shown, and their authority rests upon the perceived outcome of this empirical denotation. The utmost in rationality has a sanction and a position that, according to taste, may be called sub-rational or supra-rational.

The value, I say, of the notion of experience for philosophy is that it asserts the finality and comprehensiveness of the method of pointing, finding, showing, and the necessity of seeing what is pointed to and accepting what is found in good faith and without discount. Were the denotative method universally followed by philosophers, then the word and the notion of experience might be discarded; it would be superfluous, for we should be in possession of everything it stands for. But as long as men prefer in philosophy, (as they so long preferred in science) to define and envisage "reality" according to esthetic, moral or logical canons, we need the notion of experience to remind us that "reality" includes whatever is denotatively found.

When the varied constituents of the wide universe, the unfavorable, the precarious, uncertain, irrational, hateful, receive the same attention that is accorded the noble, honorable and true, then philosophy may conceivably dispense with the conception of experience. But till that day arrives, we need a cautionary and directive word,

like experience, to remind us that the world which is lived, suffered and enjoyed as well as logically thought of, has the last word in all human inquiries and surmises. This is a doctrine of humility; but it is also a doctrine of direction. For it tells us to open the eyes and ears of the mind, to be sensitive to all the varied phases of life and history. Nothing is more ironical than that philosophers who have so professed universality have so often been one-sided specialists, confined to that which is authentically and surely *known*, ignoring ignorance, error, folly and the common enjoyments and adornments of life; disposing of these by regarding them as due to our "finite" natures —a blest word that does for moderns what "non-being" was made to do for the Greeks.

The history of thought sufficiently manifests the need for a method of procedure that sets pointing, finding and showing, ahead of methods that substitute ratiocination and its conclusions for things that are done, suffered and imagined. Philosophers are wont to start with highly simplified premises. They do this not inadvertently, but with pride, as evidence that they really understand philosophic business. Absolute certainty in knowledge of things and absolute security in the ordering of life have often been assumed to be the goal of philosophic search; consequently philosophers have set out with data and principles sufficiently simple to yield what is sought. When some historic religion is ceasing to confer upon men a sense of certainty and security men especially resort to philosophy for a substitute. So they did in Greece; in Europe in the seventeenth century, and so we do today. Forms and essences, inner introspective facts, mathematical truths may be resorted to. This is a varying matter

of the temporal scene. The constant is demand for assurance and order, and the demand is met only by ignoring a vast number of the things that nature presents to us.

When we look for instances of a simplifying procedure exercised in this bias, we think perhaps most readily of Descartes with his certainty of thinking, of Spinoza with his conviction that a true idea carries truth intrinsically in itself so whatever must be thought, must—and alone must—*be*. But thinkers who profess empiricism also afford examples: there is Locke with his "simple idea," Hume with his "impression." And I do not see that contemporary hankering after ultimate "sense-data," or conviction that mathematical logistic is at last to open to philosophy the arcana of ultimate truth, differ in principle.

Now the notion of experience, however devoid of differential subject-matter—since it includes all subject-matters—, at least tells us that we must not start with arbitrarily selected simples, and from them deduce the complex and varied, assigning what cannot be thus deduced to an inferior realm of being. It warns us that the tangled and complex is what we primarily find; that we work from and within it to discriminate, reduce, analyze; and that we must keep track of these activities, pointing to *them*, as well as to the things upon which they are exercised, and to their refined conclusions. When we contemplate their fruits we are not to ignore the art by which they are produced. There is a place for polishers of stones and for those who put the stones together to make temples and palaces. But "experience" reminds us that a stone was once part of some stratum of the earth, and that a quarryman pried it loose and another workman blew the massive rock to smaller pieces, before it could be smooth-hewn and

fitted into an ordered and regular structure. Empirical method warns us that systems which set out from things said to be ultimate and simple have always worked with loaded dice; their premises have been framed to yield desired conclusions.

Professed sceptics rarely fare better, whether they consistently maintain the attitude, or whether they employ doubt in order to discover a triumphant exit into certitude. Man is naturally a credulous animal. It is well to be warned against too easy and inflexible acceptance of beliefs which, before they command acceptance, should exhibit credentials. But some things, things of action and suffering, are not matters of belief at all; they just are. No one ever doubted birth, death, love or hate, no matter how much theories about them justly provoke doubts. Philosophers have exhibited proper ingenuity in pointing out holes in the beliefs of common sense, but they have also displayed improper ingenuity in ignoring the empirical things that every one has; the things that so denote themselves that they *have* to be dealt with. No wonder Hume's doubts vanished when he played backgammon and made merry with his friends. Not that many of his doubts of doctrines were not suitable, but that in his companionships he was involved in another world from that to which he confined his philosophizing. Merriment and sorrow are not of the same order as beliefs, impressions and ideas. The advice of Epictetus to a fellow-slave whose master adhered to the school of sceptics, to rub his master with a curry-comb and anoint him with pepper-sauce is irrelevant to doubt about systematized beliefs, but it is a pertinent reminder that whatever things we are compelled to pay heed to, things of joy and

suffering, cannot have their *existence* honestly called in question.

When a thinker ventures to begin with things which are too crude and coarse to come within the ken of intellectualists, he finds, moreover, that as an empiricist he is not obliged to face the miscellaneous world *en masse*. Things are pointed to in kinds, possessed of order and arrangement. Pre-philosophic selections and arrangings may not be final for reflective thought, but they are significant for it. The bias they manifest is not that of the closet or library, but of men who have responded to the one-sided pressures of natural events. The key to the trends of nature is found in the adjectives that are commonly prefixed to experience. Experience is political, religious, esthetic, industrial, intellectual, mine, yours.

The adjectives denote that things present themselves in characteristic contexts, with different savors, colors, weights, tempos and directions. Experience as method warns us to give impartial attention to all of these diversifications. Non-empirical method sets out with the assumption that some one of these groupings of things is privileged; that it is supreme of its own right, that it furnishes a standard by which to measure the significance and real quality of everything else. The sequel is then but a dialectic. Philosophers deduce results in accordance with what is logically implied in their own choice of standard and measure.

Philosophy is a branch of that phase of things which is qualified by the adjective "intellectual." Since it is the express and proper business of the philosopher to subject things to reflection with a view to knowledge (to justifiable belief), he is prone to take the outcome of reflection for

something antecedent. That is to say, instead of seeing that the product of knowing is *statement* of things, he is given to taking it as an *existential equivalent* of what things really are "in themselves," so that the subject-matter of other modes of experience are deviations, shortcomings, or trespasses—or as the dialectical philosopher puts it, mere "phenomena." The experiential or denotative method tells us that we must go behind the refinements and elaborations of reflective experience to the gross and compulsory things of our doings, enjoyments and sufferings—to the things that force us to labor, that satisfy needs, that surprise us with beauty, that compel obedience under penalty. A common divisor is a convenience, and a greatest common divisor has the greatest degree of convenience. But there is no reason for supposing that its intrinsic "reality" or truth is greater than that of the numbers it divides. The objects of intellectual experience are the greatest common divisor of the things of other modes; they have that remarkable value, but to convert them into exclusive reality is the sure road to arbitrary divisions and insoluble problems.

Not all philosophies have assumed that reflective experience, with logic as its norm, is the standard for experiential, religious, esthetic, industrial, social objects. Many thinkers have concluded that dialectic ends in an impasse; that it involves us in contradictory statements. Then they have appealed to something which they assert is higher than thought. But it is significant that they think of this higher recourse as a higher kind of *knowledge*, as intuition, or immediate insight, mystical certainty of the truly real. Thus the thinker still shows his inability to take things as he has to take them as a human being, as

things to pay heed to under penalty of death and defeat, things to use and enjoy, to master and submit to. The notion still lurks that in their intrinsic being they are things of knowledge.

Then there are philosophers who, like Kant, finding themselves in intellectual difficulties, assert that moral experience reveals things-in-themselves at a deeper level than does science. There are a larger number who look askance upon science, and who claim that religious experience penetrates behind the screen that limits the vision of intellect. These apparent exceptions prove the rule. For the claim implies that moral or religious experience takes the place of knowledge, doing sufficiently, absolutely, what natural knowledge does only partially and relatively. The implication is that morals and religion have a direct revelatory worth. Now it is one thing to say that the world is such that men approach certain objects with awe, worship, piety, sacrifice and prayer, and that this is a fact which a theory of existence must reckon with as truly as with the facts of science. But it is a different thing to say that religious experience gives *evidence* of the reality of its *own* objects, or that the consciousness of an obligation proves the validity of its special object, or the general fact of duty carries within itself any deliverance as to its source in reality. Helen of Troy, Hamlet of Denmark are instances of things that require as much attention from the philosopher as do molecules and integers: but their presence in experience does not guarantee that they are the same kind of things as the latter.

We must conceive the world in terms which make it possible for devotion, piety, love, beauty, and mystery to be as real as anything else. But whether the loved and

devotional objects have all the qualities which the lover and the devout worshipper attribute to them is a matter to be settled by evidence, and evidence is always extrinsic. Injunctions and prohibitions which are empirically unescapable, may be called categorical imperatives, and their existence may be quite as significant for a just theory of nature as is the law of gravitation. But what sort of objects beyond themselves they give evidence of, whether tribal taboos, a Kantian thing-in-itself, God, a political sovereign or a net work of social customs evolved in the effort to satisfy needs, is a question to be settled by the denotative method, by finding and pointing to the things in the concrete contexts in which they present themselves.

Even the classic empiricisms of philosophical history have been concerned almost exclusively with experience as knowledge, and with objects as known or unknowable. But, since objects are found and dealt with in many other ways than those of knowledge, a genuine empiricism will set out with all the adjectival groupings of macroscopic experience, starting from them as all upon the same level of worth; subsequent inquiry can review the starting point when it is found necessary. One can be insane without knowing he is insane and one may know insanity without being crazy; indeed absence of the direct experience is said to be an indispensable condition of study of insanity. Adequate recognition of the implications of such a fact as this might almost be said to be the chief contribution which empirical method has to make to philosophy.

For it indicates that *being* and *having* things in ways other than knowing them, in ways never identical with knowing them, exist, and are preconditions of reflection and knowl-

edge. *Being* angry, stupid, wise, inquiring; *having* sugar, the light of day, money, houses and lands, friends, laws, masters, subjects, pain and joy, occur in dimensions incommensurable to knowing these things which we are and have and use, and which have and use us. Their existence is unique, and, strictly speaking, indescribable; they can *only be* and be *had*, and then be pointed to in reflection. In the proper sense of the word, their existence is absolute, being qualitative. All cognitive experience must start from and must terminate in being and having things in just such unique, irreparable and compelling ways. And until this fact is a commonplace in philosophy, the notion of experience will not be a truism for philosophers.

Inevitably our argument travels in a circle and comes back to where we started. Modern philosophy is openly, ancient philosophy covertly, a theory of knowledge, and of things as known. A theory of knowledge in the sense of how to know most economically, liberally, effectively, a technique of instructive and rewarding inquiry is indispensable. But what has gone by the name of theory of knowledge has not been such an affair. It has been a discussion of whether we can know at all, a matter of validating or refuting wholesale scepticism (instead of how to conduct doubt profitably); of how far knowledge extends, what its limits are, limits not at a specific time and place, but inherent and final. What has been said professes to give the explanation of this fact. It is due to failure to take the various phases of experienced things simply, directly, and impartially. It is due to bias of the intellectualist in favor of his own specialized professional experience.

Bias in favor of things in their capacity of being objects of knowledge, when it is yielded to, renders it impossible to distinguish between being and having things and knowing them. If *having* sweet, red, hard, pain, etc., is of necessity identical with knowing these things, then the classic problems of epistemology, and the necessity of defending science against wholesale sceptical doubts are inevitable. I mention in illustration the two traditional questions. First, there is the dispute between the epistemological idealist and realist. Are sweet, hard, solid pain, square, etc., psychical or physical? Empirically, the obvious answer is that they are neither. They are the unique qualities which they are, the things pointed to and had. But *knowledge* involves classification. If to have is also to know, then these things cannot "really" be simply the qualities they are; they must be related, subsumed, interpreted. And the two most general terms of classificatory knowing are physical and mental. Hence the dispute.

Another problem which is inevitable is the relation of immediate or "presentative" knowledge, sensory acquaintance or whatever, to reflective and inferential knowledge, to science. How is the reality of the proper objects of the latter to be "reconciled" with the reality of the things —whether defined as physical or psychical—of immediate sensuous or presentative "knowledge?" The problem is dialectically attractive, as is shown by the immense amount of ingenuity that has been expended upon it. But no generally satisfactory answer has ever been found and it is predictable that none ever will be. For the problem, empirically speaking, is unreal. There are not two kinds of knowledge whose objects have to be reconciled.

There are two dimensions of experienced things: one that of having them, and the other that of knowing about them so that we can again have them in more meaningful and secure ways. It is no easy matter to know about the things we have and are, whether it be the state, measles, virtue or redness. Hence there *is* a problem of knowledge; namely, the problem of how to find out what it is needful to find out about these things in order to secure, rectify and avoid being and having them.

But a problem of knowledge in general is, to speak brutally, nonsense. For knowledge is itself one of the things that we empirically *have*. While scepticism may be in place at any time about any specific intellectual belief and conclusion, in order to keep us on the alert, to keep us inquiring and curious, scepticism as to the things which we *have* and *are* is impossible. No one ever frankly engaged in it. Its pretentiousness is concealed, however, by the failure to distinguish between objects of knowledge where doubt is legitimate, since they are matters of interpretation and classification, (of theory), and things which are directly had. A man may doubt whether he has the measles, because measles is an intellectual term, a classification, but he cannot doubt what he empirically has—not as has so often been asserted because he has an immediately certain knowledge of it, but because it is not a matter of knowledge, an intellectual affair, at all, not an affair of truth or falsity, certitude, or doubt, but one of existence.

He may not know that he is ailing, much less what his ailment is; but unless there is something immediately and non-cognitively present in experience so that it is capable of being pointed to in subsequent reflection and in

action which embodies the fruits of reflection, knowledge has neither subject-matter nor objective. In traditional epistemologies, this fact has been both recognized and perverted; it is said that while we can doubt whether a particular thing is red or sweet, we have an immediate or intuitive cognitive certitude that we are affected by redness or sweetness or have a sensation of sweet and red. But as cognized, red and sweet are data only because they are *taken* in thought. Their givenness is something inputed; they are primary and immediate relatively to more complex processes of inquiry. It required a high degree of intellectual specialization, backed by technical knowledge of the nervous system, before even the concept of sensory data could emerge. It still taxes the resources of investigation to determine just what are "immediate data" in a particular problem. To know a quality *as* sensation is to have performed an act of complicated objective reference; it is not to register an inherently given property. The epistemological sensationalist and the epistemological rationalist share the same error; belief that cognitive property is intrinsic, borne on the face.

Because empirical method is denotative, it is realistic in the unsophisticated sense of the word. Things are first acted toward, suffered; and it is for the things themselves as they are followed up to tell by their own traits whether they are "subjective" or "objective." These terms, like physical and psychical, express classificatory discriminations, and there is no presumption of primacy on the side of the subjective. As a matter of historic fact, the primitive bias of man is all toward objective classifications. Whatever can be denoted is there inde-

pendent of volition (volition itself occurring without volition), and its thereness, its independence of choice, renders it, for uncritical man, cosmic and fated. Only when vanity, prestige, and property rights are involved does the natural man tend, like Jack Horner with his plum, to employ a subjective or personal interpretation.

Subsequently, reflection attributes occurrences like disease, misfortune, and error to the individual person's own doings, instead of imputing them to gods or enemies or wizardy or fate. There is then an intelligible sense in which these things may be said to have been transferred from an objective to a subjective field. But there is even more sense in saying that they have been given a *different* objective reference, in those cases where they are referred to a personal subject as their seat and source. When we say that a man's illness is due to his own imprudence and not to a foreign substance magically projected into his interior by a subtle enemy, we are still discoursing within the realm of objective events. The case is not otherwise when we attribute error to something in a man's own disposition, instead of to the intent of hostile gods to blind him, or to the inherently illusory nature of things. Practically, the distinction thus drawn between subjective and objective, personal and impersonal, causation and locus is of immense importance. But for theory, it falls within a continuous world of events.

Most of the things that have been called subjective by philosophers have an even more obvious objective status. Political institutions, the household, art, technologies, embodied objective events long before science and philosophy arose. Political experience deals with barriers, mountains, rivers, seas, forests and plains. Men

fight for these things; for them they exercise jurisdiction; they obey and rebel. Being and having, exercising and suffering such things as these, exist in the open and public world. As we digest foods derived from the extra-personal world long before we study or are aware of processes occurring in our own bodily tissues, so we live in a world of objective acceptances and compulsions long before we are aware of attitudes of our own, and of the action of say the nervous system, in bringing us into effective relationship with them. The knowledge of our own attitudes and of the operation of the nervous system is no more a substitute for the direct operation of the things than metabolic processes are a substitute for food materials. In one case as in the other we have become acquainted with an added *object;* and by means of this added object further active relationships with the extra-personal world are instituted.

When we speak of esthetic experience we do not mean something private and psychical. The choir of heaven and the consent of the earth are implicated, as are paints, brushes, marbles, chisels, temples, palaces, and theaters. Appreciation is appreciation of some *thing*, not of itself. We are lovingly and excitedly aware of the objects long before we are aware of our own attitude; and the acquisition of ability to distinguish that attitude marks only an increase of distinctions in original subject-matter. Although contemporary theory emphasizes the psychologic and personal aspect of religion, historic religions have always had their holy places, times, persons and rites. One may believe that these objects did not have in the order of objects of knowledge the qualities ascribed to them in belief, but the testimony in behalf of the natural

objective reference of the subject-matter of experience then becomes only the more impressive. Myths would not be taken to be on a level with physical facts were not the bias of experience toward the objective. Recognition of objects of worship and prayer as ideal or as "essences," treatment of them as poetic or esthetic, represents a late achievement of reflection, not an original datum. If research into religious phenomena has proved anything it is that acts, rites, cults, ceremonies, institutions, are primary, emotional beliefs then clustering about them. Even religious experience does not escape the objective compulsions which inhere in the more direct experience where man tills the soil with the sweat of his brow and woman brings forth in labor. The objects that are auxiliary and hostile to success in these acts affect the most refined and spiritualized sentiments and conceptions.

The notion that experience is solely experienc*ing*, a succession of personal sensations, images and feelings is wholly a recent notion. There is a genuine and important discovery implied by it. But it may be asserted that no one ever took it literally; it has been only a starting-point for dialectical developments which are sufficiently interesting to obscure the absurdity of the basic conception. The discovery is important; for it marks the discovery of operation of organic attitudes and dispositions in the beliefs we hold and the necessity of controlling them if beliefs are to be effectively controlled. The literal isolation of processes of experiencing, as if they were actually something solid and integral, is absurd; because dispositions and attitudes are always towards or from things beyond themselves. To love and hate, desire and fear, believe and deny, are not just states of mind in

nor states of an animal body; they are *active* performances to and about other things,—acceptances and rejections, assimilations and forth-spewings of other things, strugglings to obtain and to escape things.

The fact that the characteristic structure and function of these acts, in complexly organized animal forms, can be detected, shown, and in turn made the subject of new modes of responsive action expresses one of the most valuable philosophic uses of empirical method. It undermines rigid dogmatism, while it also changes scepticism from a wholesale and barren possession of a few aloof thinkers into a common and fertile method of inquiry into specific beliefs. The things which a man experiences come to him clothed with meanings which originate in custom and tradition. From his birth an individual sees persons about him treat things in certain ways, subject them to certain uses, assign to them certain potencies. The things are thereby invested for him with certain properties, and the investiture appears intrinsic and indissoluble. The potency of custom over beliefs never received a fatal wound until physiology and psychology showed how imitation, suggestion, stimulation, prestige, operate to call out certain responses, and how habit confirms and consolidates the responses into apparent matter-of-course unquestioned necessities.

Man lives by expectation, but the content of expectation, *what* is anticipated, depends upon memory; and memories are group affairs before they are personal recalls. The tradition that controls belief, expectation and memory, is limited and usually perverted. Not even wood always burns; seeds do not always grow, nor foodstuffs always nourish; water in quenching thirst may

bring a malignant plague. In complex matters the frustration of conduct based upon expectant belief is still more pervasive. The man enmeshed in labor accounts up to a certain point for these unaccountable behaviors of things by noting further qualifying conditions that affect efficacy; soon reaching the end of his tether, he then falls back upon mysterious potencies, concealed personal agencies and magical counteractions. The thinker who enjoys leisure and is removed from the immediate necessity of doing something about these predicaments, seeks certitude in a higher, more metaphysical realm of Being, and defines as mere "appearance" the region of actual and possible frustrations. Or he turns disillusioned sceptic, and will abstain from all intellectual commitment to objects. The first method creates superstitions; the second is sterile, because it affords no solution of the actual problem, that of regulating specific beliefs about objects, so that they take account of what is ulterior and eventual. The finding and pointing out of the roles of personal attitudes and dispositions in inference and belief as well as in all other relationships with things (a discovery that constitutes psychology as it becomes systematic), is an indispensable part of this art of regulating ideas about objects; and this art is an indispensable factor in liberation.

Philosophers however misinterpreted the discovery. The old confusion persisted; the identification of direct having with knowing seemed to be the one sound and permanent part of the classic philosophic tradition. "Having" these personal dispositions being in a sense basic to other "havings", it was translated into the belief that they were the first and primary objects of knowledge, possessed of the attributes of reality attributed by classic

philosophy to *its* prior and primary objects of knowledge. Meanwhile men of science and affairs *used* the discovery; it was to them an assurance that by taking better care of the generation and employment of these personal attitudes, mankind could attain to a more secure and meaningful regulation of its ineradicable and coercive concern with things of the environment.

Thus the value of the notion of experience for philosophic reflection is that it denotes both the field, the sun and clouds and rain, seeds, and harvest, and the man who labors, who plans, invents, uses, suffers, and enjoys. Experience denotes what is experienced, the world of events and persons; and it denotes that world caught up into experiencing, the career and destiny of mankind. Nature's place in man is no less significant than man's place in nature. Man in nature is man subjected; nature in man, recognized and used, is intelligence and art. The value of experience for the philosopher is that it serves as a constant reminder of something which is neither exclusive and isolated subject or object, matter or mind, nor yet one plus the other. The fact of integration in life is a basic fact, and until its recognition becomes habitual, unconscious and pervasive, we need a word like experience to remind us of it, and to keep before thought the distortions that occur when the integration is ignored or denied.

The denotations that constitute experience point to history, to temporal process. The technically expert are aware how much ingenuity has been spent upon discovering something which shall be wholly present, so completely present as to exclude movement and change. There are *phases* of things to which this search is pertinent. There are moments of consummation when before and

after are legitimately forgotten, and the sole stake of man is in the present. But even such objects are discovered to arise as culminations of processes, and to be in turn transitive and effective, while they may be also predictive or cognitively significant. The legitimacy of timeless absorption is no argument in behalf of the legitimacy of timeless objects. Experience is history; and the *taking* of some objects as final is itself an episode in history. The testimony of an absorbed consciousness that at last it rests upon something superior to the vicissitudes of time is of no more cognitive worth than the testimony of any other purely immediate consciousness. That is, it is not testimony at all, it is a having, not a knowing. And hence when treated as cognition, it is never natural and naïve; it is suborned in the interest of a sophisticated metaphysics. There is no testimony in such moments just because of absorption in the immediate qualities of the object. There is enjoyment and possession, with no need of thought as to how the object came or whither it is going, what evidence it gives. And when it turns evidence, it always testifies to an existence which is partial or particular, and local.

The assumption that the ultimate and the immediate object is timeless is responsible for one of the insoluble problems of certain types of philosophy. The past and future are rendered purely inferential, speculative, something to be reached by pure faith. But in fact anything denoted is found to have temporal quality and reference; it has movement from and towards *within* it; it is marked by waxings and wanings. The translation of temporal quality into an *order* of time is an intellectual arrangement, and is subject to doubt and error. Although past-

ness and futurity are qualities of everything present, su
presence does not guarantee the date at which Columb
discovered America nor when the next eclipse of the mo
will occur. For these things are matters that requi
measurements, comparisons, connection with remote c
currences. But objects of present experience have t
actuality of a temporal procession, and accordingly refle
tion may assign things an order of succession with
something which non-reflectively exists and is had.

The import of these remarks is anticipatory. The
full meaning can be had only when some of the denotation
summed up in the notion of experience have been followe
out and described. A justification of recapitulation o
our prefactory considerations is the fact that experi
ence has so often been employed to designate not
method but a stuff or subject-matter. It then gains
discriminatory and selective meaning and is used to justify
apart from actual experience and antecedent to it, som
kinds of objects and to disparage and condemn others
"Experience" becomes a theory, and, like all theories a
such, dialectic and *a priori*. The objection that th
alternative notion of experience is so catholic and univer
sal in application that it no longer has any distinctiv
meaning is sound in principle. But in the face of histori
philosophies and the reigning tradition, the alternativ
notion is instructive and useful. It serves as a caution
against methods that have led to wrong conclusions, and
a reminder of a proper procedure to be followed.

In the first place it guards us against accepting as orig
inal, primitive and simple, distinctions that have becom
familar to us, that are a customary part of our intellec
tual inheritance—such distinctions for example as that o

he physical and mental. It warns us that all intellec-
ual terms are the products of discrimination and classi-
ication, and that we must, as philosophers, go back to
he primitive situations of life that antecede and generate
hese reflective interpretations, so that we re-live former
rocesses of interpretation in a wary manner, with eyes
onstantly upon the things to which they refer. Thus
mpiricism is the truly critical method; it puts us know-
ngly and cautiously through steps which were first taken
ncritically, and exposed to all kinds of adventitious
nfluence.

In the second place, the notion of experience reminds us
hat, prior to philosophic reflection, objects have fallen
nto certain groupings, designated by the adjectives we
eadily prefix to the word experience:—adjectives like
noral, esthetic, intellectual, religious, personal, political.
he notion thus warns us against the tradition which
nakes the objects of a certain kind of experience, the
ognitive, the fixed standard for estimating the "reality"
nd import of all other kinds of things. It cautions us
gainst transferring the qualities characteristic of objects
n a certain mode of organization to objects in other modes.
Knowledge itself must be experienced; it must be had,
ossessed, enacted, before it can be known, and the having
f it is no more identical with knowing it, or knowing it
ith having it, than is the case with anger, being ill, or
eing the possessor by inheritance of an estate. We
ave to identify cases of knowing by direct denotation
efore we can have a reflective experience of them, just
s we do with good and bad, red and green, sweet and
our.

In the third place, the notion cautions us that we must begin with things in their complex entanglements rather than with simplifications made for the purpose of effective judgment and action; whether the purpose is economy or dialectical esthetic or moral. The simplifications of philosophic data have been largely determined by apologetic methods, that is by interest in dignifying certain kinds and phases of things. So strong is this tendency that if a philosopher points to any particular thing as important enough to demand notation, it is practically certain that some critic will shift the issue from whether the denoted thing is found to be as he has described it to be, to the question of value. For example, I have asserted that all denoted things possess temporal quality. It is reasonably certain that this statement will be taken by some critic to indicate a preference on my part for change over permanence, an implied statement that it is *better* that things should be in flux. It has been stated that objects are primarily denoted in their practical relationships, as things of doing, suffering, contact, possession and use. Instead of being discussed as a question of denotation, the philosophic tradition is such that the statement will be taken as an eulogy; as implying that practice is better than theory. It is then "refuted" by pointing out the superior charm of the contemplative life.

This bias is so strong and so persistent that it testifies, I suppose, to a fact of importance, to the fact that most philosophical simplifications are due to a moral interest which is ignored and denied. Our constant and inalienable concern is with good and bad, prosperity and failure, and hence with choice. We are constructed to think in terms of value, of bearing upon welfare. The ideal of

welfare varies, but the influence of interest in it is pervasive and inescapable. In a vital, though not the conventional, sense all men think with a moral bias and concern, the "immoral" man as truly as the righteous man; wicked and just men being characterized by bents toward different kinds of things as good. Now this fact seems to me of great importance for philosophy; it indicates that in some sense all philosophy is a branch of morals. But acknowledgment that the ultimate ground of reflection is to enable men better to make choice of things as good and bad is in truth the opposite attitude from that which immediately converts traits of existence into moral qualities, and which transforms preferred qualities into properties of true and real being. For the former concerns action to be performed, the direction of desire, purpose and endeavor. The latter is an affair of existence as it is found to be; material, it may be, of choice and action, but material, not goal or finished object.

For reflection the eventual is always better or worse than the given. But since it would also be better if the eventual good were now given, the philosopher, belonging by status to a leisure class relieved from the more urgent necessity of dealing with conditions, converts the eventual into some kind of Being, something which *is*, even if it does not *exist*. Permanence, real essence, totality, order, unity, rationality, the *unum, verum, et bonum* of the classic tradition, are obviously eulogistic predicates. When accordingly we find such terms used to describe the foundations and proper conclusions of a philosophic system, there is ground for suspecting that an artificial simplification of existence has been performed. Reflection determining preference for an eventual good has dialectically

wrought a miracle of transubstantiation. Here if anywhere it is needful that we return to the mixed and entangled things expressed by the term experience.

The occurrence of the moral fallacy is obscured and disguised in subtle ways. That having the greatest power of self-deception springs from the conventional associations of the word moral. When a thinker has escaped from them he fancies that he has escaped morals. His conclusions are fixed by a preference for a reflective "good," that is to say by preference for things which have a quality of goodness that satisfies the requirements of reasonable examination and judgment. But overtly he may contemn the moral life, on the ground that it involves struggle, effort, disappointment, constantly renewed. Hence he asserts that the true good is non-moral, since it includes none of these things. According to special temperament and to accidents of education, due in turn largely to social and economic status, the true good is then conceived either esthetically, or dialectically, or in terms borrowed from a religious context. Then "reality" as the object of philosophic research is described with the properties required by the choice of good that has occurred. The significant thing, however, is not the thinker's disparaging view of moral life as conflict and practical effort; it is that his *reflective* idea of the good, which after all is the essence of morals, has been converted into a norm and model of Being. His choice of what is good, whether logically conceived or instigated by cultivated taste, is the heart of the matter.

The operation of choice is, I suppose, inevitable in any enterprise into which reflection enters. It is not in itself falsifying. Deception lies in the fact that its presence is

oncealed, disguised, denied. An empirical method finds nd points to the operation of choice as it does to any other vent. Thus it protects us from conversion of eventual unctions into antecedent existence: a conversion that ıay be said to be *the* philosophic fallacy, whether it be erformed in behalf of mathematical subsistences, esthe-ic essences, the purely physical order of nature, or God. he present writer does not profess any greater candor of ıtent than animates fellow philosophers. But the pur-uance of an empirical method, is , it is submitted, the way o secure execution of candid intent. Whatever is em-loyed as subject-matter of choice, determining its need nd giving it guidance, an empirical method frankly ıdicates for what it is; and the fact of choice, with its orkings and consequences, an empirical method points ut with equal openness.

The adoption of an empirical method is no guarantee ıat all the things relevant to any particular conclusion ill actually be found or pointed to, or that when found ıey will be correctly shown or communicated. But ıe empirical method points out when and where and ow things of a designated description have been arrived t. It places before others a map of the road that has een travelled; they may accordingly, if they will, re-avel the road to inspect the landscape for themselves. hus the findings of one may be rectified and extended by ıe findings of others, with as much assurance as is ımanly possible of confirmation, extension and rectifi-ıtion. The adoption of empirical, or denotative, method ould thus procure for philosophic reflection something of ıat cooperative tendency toward consensus which marks quiry in the natural sciences. The scientific investiga-

tor convinces others not by the plausibility of his definitions and the cogency of his dialectic, but by placing before them the specified course of experiences of searchings, doings and findings in consequence of which certain things have been found. His appeal is for others to traverse a similar course, so as to see how what they find corresponds with his report.

Dialectic thereby itself receives a designated status and office. As it occurs in philosophic thought its dependence upon an original act of selective choice is often not avowed. Its premises are alleged to be indubitable and self-guaranteeing. Honest empirical method will state when and where and why the act of selection took place, and thus enable others to repeat it and test its worth. Selective choice, denoted as an empirical event will reveal the basis and bearing of intellectual simplifications; they then cease to be of such a self-enclosed nature as to be affairs only of opinion and argument, admitting no alternatives save complete acceptance or rejection. Choice that is disguised or denied is the source of those astounding differences of philosophic belief that startle the beginner and that become the plaything of the expert. Choice that is avowed is an experiment to be tried on its merits and tested by its results. Under all the captions that are called immediate knowledge, or self-sufficient certitude of belief, whether logical, esthetic or epistemological, there is something selected for a purpose, and hence not simple, not self-evident and not intrinsically eulogizable. State the purpose so that it may be re-experienced, and its value and the pertinency of selection made in its behalf may be tested. The purport of thinking, scientific and philosophic, is not to eliminate choice

but to render it less arbitrary, and more significant. It loses its arbitrary character when its quality and consequences are such as to commend themselves to the reflection of others after they have betaken themselves to the situations indicated; it becomes significant when reason for the choice is found to be weighty, and its consequences momentous. This statement is not a commendation of the will to believe. It is not a statement that we *should* choose, or that *some* choices are self-justifying. It is a statement that wherever reflection occurs and intelligence operates, a selective discrimination *does* occur. The justification of a choice is wholly another matter; it is extrinsic. It depends upon the extent in which observation, memory and forethought have entered into making the choice, and upon the consequences that flow from it. When choice is avowed, others can repeat the course of the experience; it is an experiment to be tried, not an automatic safety device.

This particular affair is referred to here not so much as matter of doctrine as to afford an illustration of the nature of empirical method. Truth or falsity depends upon what others find when they warily perform the experiment of observing reflective events. An empirical finding is refuted not by denial that one finds things to be thus and so, but by giving directions for a course of experience that results in finding its opposite to be the case. To convince of error as well as to lead to truth is to assist another to see and find something which he hitherto has failed to find and recognize. All of the wit and subtlety of reflection and of dialectic find scope in the elaboration and conveying of directions that intelligibly point out a course to be followed. Every system of philosophy presents the con-

sequences of some such experiment. As experiments, each has contributed something of worth to our observation of the events and qualities of experienceable objects. Some harsh criticisms of traditional philosophy have already been suggested; others will doubtless follow. But the criticism is not directed at the experiments; it is aimed at the denial to them by the philosophic tradition of selective experimental quality, a denial which has isolated them from their actual context and function, and has thereby converted potential illuminations into arbitrary assertions.

All philosophies employ empirical subject-matter, even the most transcendental; there is nothing else for them to go by. But in ignoring the kind of empirical situation to which their themes pertain and in failing to supply directions for experimental pointing and searching they become non-empirical. Hence it may be asserted that the final issue of empirical method is whether the guide and standard of beliefs and conduct lies within or without the *shareable* situations of life. The ultimate accusation levelled against professedly non-empirical philosophies is that in casting aspersion upon the events and objects of experience, they deny the power of common life to develop its own regulative methods and to furnish from within itself adequate goals, ideals, and criteria. Thus in effect they claim a private access to truth and deprive the things of common experience of the enlightenment and guidance that philosophy might otherwise derive from them. The transcendentalist has conspired with his arch-enemy, the sensualist, to narrow the acknowledged

ubject-matter of experience and to lessen its potencies or a wider and directed reflective choice. Respect for xperience is respect for its possibilities in thought and nowledge as well as an enforced attention to its joys and orrows. Intellectual piety toward experience is a pre-ondition of the direction of life and of tolerant and gener-us cooperation among men. Respect for the things of xperience alone brings with it such a respect for others, ne centres of experience, as is free from patronage, dom-nation and the will to impose.

CHAPTER TWO

Existence as Precarious and as Stable

It was suggested in the last chapter that experience has its equivalents in such affairs as history, life, culture. Reference to these other affairs enables us to put to one side the reminiscences which so readily give the word experience a sectarian and provincial content. According to Tylor, culture is "that complex whole which includes knowledge, belief, art, morals, custom, and any other capabilities acquired by a man as a member of society." It is, in some sense, a whole, but it is a complex, a diversified whole. It is differentiated into religion, magic, law, fine and useful art, science, philosophy, language, domestic and political relations, etc. Consider the following words of an anthropologist and ask if they do not fairly define the problem of philosophy, although intended for another purpose. "Cultural reality is never wholly deterministic nor yet wholly accidental never wholly psychological nor yet wholly objective never wholly of yesterday nor yet wholly of today, but combines all of these in its existential reality. . . . A reconstructive synthesis re-establishes the synthetic unity necessarily lost in the process of analytic dismemberment."[1] I do not mean that philosophy is to be merged in an anthropological view of culture. But in a different context and by a different method, it has the task of analytic dismemberment and synthetic reconstruction of experience; the phenomena of culture as presented by

[1] Goldenweiser.

ıe anthropologist provide, moreover, precious material ɔ aid the performance of this office, material more ertinent to the task of philosophizing than that of sychology isolated from a theory of culture.

A feature of existence which is emphasized by cultural henomena is the precarious and perilous. Sumner efers to Grimm as authority for the statement that the ermanic tribes had over a thousand distinct sayings, roverbs and apothegms, concerning luck. Time is rief, and this statement must stand instead of the dis-ɔurse which the subject deserves. Man finds himself ving in an aleatory world; his existence involves, to put baldly, a gamble. The world is a scene of risk; it is ncertain, unstable, uncannily unstable. Its dangers are regular, inconstant, not to be counted upon as to their mes and seasons. Although persistent, they are spora-ic, episodic. It is darkest just before dawn; pride ɔes before a fall; the moment of greatest prosperity is ıe moment most charged with ill-omen, most opportune ɔr the evil eye. Plague, famine, failure of crops, disease, eath, defeat in battle, are always just around the corner, ıd so are abundance, strength, victory, festival and song. uck is proverbially both good and bad in its distribu-ons. The sacred and the accursed are potentialities the same situation; and there is no category of things hich has not embodied the sacred and accursed: per-ɔns, words, places, times, directions in space, stones, inds, animals, stars.

Anthropologists have shown incontrovertibly the part ayed by the precarious aspect of the world in generating ligion with its ceremonies, rites, cults, myths, magic; ıd it has shown the pervasive penetration of these af-

fairs into morals, law, art, and industry. Beliefs and dispositions connected with them are the background out of which philosophy and secular morals slowly developed, as well as more slowly those late inventions, art for art's sake, and business is business. Interesting and instructive as is this fact, it is not the ramifications which here concern us. We must not be diverted to consider the consequences for philosophy, even for doctrines reigning today, of facts concerning the origin of philosophies. We confine ourselves to one outstanding fact: the evidence that the world of empirical things includes the uncertain, unpredictable, uncontrollable, and hazardous.

It is an old saying that the gods were born of fear. The saying is only too likely to strengthen a misconception bred by confirmed subjective habits. We first endow man in isolation with an instinct of fear and then we imagine him irrationally ejecting that fear into the environment, scattering broadcast as it were, the fruits of his own purely personal limitations, and thereby creating superstition. But fear, whether an instinct or an acquisition, is a function of the environment. Man fears because he exists in a fearful, an awful world. The *world* is precarious and perilous. It is as easily accessible and striking evidence of this fact that primitive experience is cited. The voice is that of early man; but the hand is that of nature, the nature in which we still live. It was not fear of gods that created the gods.

For if the life of early man is filled with expiations and propitiations, if in his feasts and festivals what is enjoyed is gratefully shared with his gods, it is not because a belief in supernatural powers created a need for ex-

iatory, propitiatory and communal offerings. Every-
ing that man achieves and possesses is got by actions
at may involve him in other and obnoxious conse-
uences in addition to those wanted and enjoyed. His
cts are trespasses upon the domain of the unknown;
nd hence atonement, if offered in season, may ward off
reful consequences that haunt even the moment of
rosperity—or that most haunt that moment. While
nknown consequences flowing from the past dog the
resent, the future is even more unknown and perilous;
ie present by that fact is ominous. If unknown forces
at decide future destiny can be placated, the man
ho will not study the methods of securing their favor
incredibly flippant. In enjoyment of present food and
mpanionship, nature, tradition and social organization
ave coöperated, thereby supplementing our own endeav-
s so petty and so feeble without this extraneous rein-
rcement. Goods are by grace not of ourselves. He
a dangerous churl who will not gratefully acknowledge
means of free-will offerings the help that sustains
m.

These things are as true today as they were in the
ys of early culture. It is not the facts which have
anged, but the methods of insurance, regulation and
knowledgment. Herbert Spencer sometimes colored
s devotion to symbolic experiences with a fact of direct
perience. When he says that every fact has two
posite sides, "the one its near or visible side and the
her its remote or invisible side," he expresses a per-
tent trait of every object in experience. The visible
set in the invisible; and in the end what is unseen
cides what happens in the seen; the tangible rests pre-

cariously upon the untouched and ungrasped. The contrast and the potential maladjustment of the immediate, the conspicuous and focal phase of things, with those indirect and hidden factors which determine the origin and career of what is present, are indestructible features of any and every experience. We may term the way in which our ancestors dealt with the contrast superstitious, but the contrast is no superstition. It is a primary datum in any experience.

We have substituted sophistication for superstition, at least measurably so. But the sophistication is often as irrational and as much at the mercy of words as the superstition it replaces. Our magical safeguard against the uncertain character of the world is to deny the existence of chance, to mumble universal and necessary law, the ubiquity of cause and effect, the uniformity of nature, universal progress, and the inherent rationality of the universe. These magic formulae borrow their potency from conditions that are not magical. Through science we have secured a degree of power of prediction and of control; through tools, machinery and an accompanying technique we have made the world more conformable to our needs, a more secure abode. We have heaped up riches and means of comfort between ourselves and the risks of the world. We have professionalized amusement as an agency of escape and forgetfulness. But when all is said and done, the fundamentally hazardous character of the world is not seriously modified, much less eliminated. Such an incident as the last war and preparations for a future war remind us that it is easy to overlook the extent to which, after all, our attainments are only devices for blurring the dis-

greeable recognition of a fact, instead of means of ltering the fact itself.

What has been said sounds pessimistic. But the con- ern is not with morals but with metaphysics, with, that s to say, the nature of the existential world in which we ive. It would have been as easy and more comfortable o emphasize good luck, grace, unexpected and unwon oys, those unsought for happenings which we so signi- cantly call happiness. We might have appealed to good ortune as evidence of this important trait of hazard in ature. Comedy is as genuine as tragedy. But it is raditional that comedy strikes a more superficial note han tragedy. And there is an even better reason for ppealing to misfortunes and mistakes as evidence of the recarious nature of the world. The problem of evil s a well recognized problem, while we rarely or never ear of a problem of good. Goods we take for granted; hey are as they should be; they are natural and proper. he good is a recognition of our deserts. When we pull ut a plum we treat it as evidence of the *real* order of ause and effect in the world. For this reason it is diffi- ult for the goods of existence to furnish as convincing vidence of the uncertain character of nature as do evils. t is the latter we term accidents, not the former, even hen their adventitious character is as certain.

What of it all, it may be asked? In the sense in which n assertion is true that uncontrolled distribution of ood and evil is evidence of the precarious, uncertain ature of existence, it is a truism, and no problem is rwarded by its reiteration. But it is submitted that ist this predicament of the inextricable mixture of ability and uncertainty gives rise to philosophy, and

that it is reflected in all its recurrent problems and issues. If classic philosophy says so much about unity and so little about unreconciled diversity, so much about the eternal and permanent, and so little about change (save as something to be resolved into combinations of the permanent), so much about necessity and so little about contingency, so much about the comprehending universal and so little about the recalcitrant particular, it may well be because the ambiguousness and ambivalence of reality are actually so pervasive. Since these things form the problem, solution is more apparent, (although not more actual) in the degree in which whatever of stability and assurance the world presents is fastened upon and asserted.

Upon their surface, the reports of the world which form our different philosophies are various to the point of stark contrariness. They range from spiritualism to materialism, from absolutism to relativistic phenomenalism, from transcendentalism to positivism, from rationalism to sensationalism, from idealism to realism, from subjectivism to bald objectivism, from Platonic realism to nominalism. The array of contraditions is so imposing as to suggest to sceptics that the mind of man has tackled an impossible job, or that philosophers have abandoned themselves to vagary. These radical oppositions in philosophers suggest however another consideration. They suggest that all their different philosophies have a common premise, and that their diversity is due to acceptance of a common premise. Variant philosophies may be looked at as different ways of supplying recipes for denying to the universe the character of contingency which it possesses so integrally that its

enial leaves the reflecting mind without a clew, and uts subsequent philosophising at the mercy of temperament, interest and local surroundings.

Quarrels among conflicting types of philosophy are hus family quarrels. They go on within the limits of a oo domestic circle, and can be settled only by venturing urther afield, and out of doors. Concerned with imuting complete, finished and sure character to the orld of real existence, even if things have to be broken nto two disconnected pieces in order to accomplish the esult, the character desiderated can plausibly be found n reason or in mechanism; in rational conceptions like hose of mathematics, or brute things like sensory data; n atoms or in essences; in consciousness or in a physical xternality which forces and overrides consciousness.

As against this common identification of reality with hat is sure, regular and finished, experience in unsophiscated forms gives evidence of a different world and oints to a different metaphysics. We live in a world hich is an impressive and irresistible mixture of sufciencies, tight completenesses, order, recurrences which ake possible prediction and control, and singularities, mbiguities, uncertain possibilities, processes going on to onsequences as yet indeterminate. They are mixed ot mechanically but vitally like the wheat and tares of he parable. We may recognize them separately but we annot divide them, for unlike wheat and tares they ow from the same root. Qualities have defects as necesry conditions of their excellencies; the instrumentalities truth are the causes of error; change gives meaning to ermanence and recurrence makes novelty possible. A orld that was wholly risky would be a world in which

adventure is impossible, and only a living world can include death. Such facts have been celebrated by thinkers like Heracleitus and Laotze; they have been greeted by theologians as furnishing occasions for exercise of divine grace; they have been elaborately formulated by various schools under a principle of relativity, so defined as to become itself final and absolute. They have rarely been frankly recognized as fundamentally significant for the formation of a naturalistic metaphysics.

Aristotle perhaps came the nearest to a start in that direction. But his thought did not go far on the road though it may be used to suggest the road which he failed to take. Aristotle acknowledges contingency but he never surrenders his bias in favor of the fixed certain and finished. His whole theory of forms and ends is a theory of the superiority in Being of rounded-out fixities. His physics is a fixation of ranks or grades of necessity and contingency so sorted that necessity measures dignity and equals degree of reality, while contingency and change measure degrees of deficiency or Being. The empirical impact and sting of the mixture of universality and singularity and chance is evaded by parcelling out the regions of space so that they have their natural abode in different portions of nature. His logic is one of definition and classification, so that its task is completed when changing and contingent things are distinguished from the necessary, universal and fixed by attribution to inferior species of things. Chance appears in thought not as a calculus of probabilities in predicting the observable occurrence of any and every event, but as marking an inferior type of syllogism. Things that move are intrinsically different from things

hat exhibit eternal regularity. Change is honestly ecognized as a genuine feature of *some* things, but the oint of the recognition is avoided by imputing altera- ion to inherent deficiency of Being over against com- lete Being which never changes. Changing things be- ng to a purgatorial realm, where they wander aimlessly ntil redeemed by love of finality of form, the acquisi- ion of which lifts them to a paradise of self-sufficient eing. With slight exaggeration, it may be said that he thoroughgoing way in which Aristotle defined, dis- nguished and classified rest and movement, the finished nd the incomplete, the actual and potential, did more o fix tradition, *the* genteel tradition one is tempted to dd, which identifies the fixed and regular with reality f Being and the changing and hazardous with deficiency f Being than ever was accomplished by those who took he shorter path of asserting that change is illusory.

His philosophy was closer to empirical facts than most odern philosophies, in that it was neither monistic nor ualistic but openly pluralistic. His plurals fall however, ithin a grammatical system, to each portion of which corresponding cosmic status is allotted. Thus his luralism solved the problem of how to have your cake nd eat it too, for a classified and hierarchically ordered et of pluralities, of variants, has none of the sting of the iscellaneous and uncoördinated plurals of our actual orld. In this classificatory scheme of separation he has een followed, though perhaps unwittingly, by many hilosophers of different import. Thus Kant assigns all hat is manifold and chaotic to one realm, that of sense, nd all that is uniform and regular to that of reason. A ngle and all embracing dialectic problem of the com-

bination of sense and thought is thereby substituted fo
the concrete problems that arise through the mixed an
varied union in existence of the variable and the con
stant, the necessary and that which proceeds uncertainly

The device is characteristic of a conversion such a
has already been commented upon of a moral insigh
to be made good in action into an antecedent meta
physics of existence or a general theory of knowledge
The striving to make stability of meaning prevail over th
instability of events is the main task of intelligent huma
effort. But when the function is dropped from th
province of art and treated as a property of given things
whether cosmological or logical, effort is rendered use
less, and a premium is put upon the accidental good
fortune of a class that happens to be furnished by th
toil of another class with products that give to life it
dignity and leisurely stability.

The argument is not forgetful that there are, fron
Heracleitus to Bergson, philosophies, metaphysics, c
change. One is grateful to them for keeping alive
sense of what classic, orthodox philosophies have whiske
out of sight. But the philosophies of flux also indicat
the intensity of the craving for the sure and fixed. The
have deified change by making it universal, regular, sure
To say this is not, I hope, verbal by-play. Consider th
wholly eulogistic fashion in which Hegel and Bergson
and the professedly evolutionary philosophers of becom
ing, have taken change. With Hegel becoming is
rational process which defines logic although a new an
strange logic, and an absolute, although new and strange
God. With Spencer, evolution is but the transitiona
process of attaining a fixed and universal equilibrium

armonious adjustment. With Bergson, change is the reative operation of God, or *is* God—one is not quite ure which. The change of change is not only cosmic yrotechnics, but is a process of divine, spiritual, energy. Ve are here in the presence of prescription, not descrip- ion. Romanticism is an evangel in the garb of meta- hysics. It sidesteps the painful, toilsome labor of nderstanding and of control which change sets us, by lorifying it for its own sake. Flux is made something o revere, something profoundly akin to what is best ithin ourselves, will and creative energy. It is not, as is in experience, a call to effort, a challenge to investi- ation, a potential doom of disaster and death.

If we follow classical terminology, philosophy is love f wisdom, while metaphysics is cognizance of the generic raits of existence. In this sense of metaphysics, incom- leteness and precariousness is a trait that must be iven footing of the same rank as the finished and fixed. ove of wisdom is concerned with finding its implica- ions for the conduct of life, in devotion to what is good. n the cognitive side, the issue is largely that of measure, f the ratio one bears to others in the situations of life. n the practical side, it is a question of the use to be ade of each, of turning each to best account. Man is aturally philosophic, rather than metaphysical or coldly cientific, noting and describing. Concerned with pru- ence if not with what is honorifically called wisdom, an naturally prizes knowledge only for the sake of its earing upon success and failure in attaining goods and voiding evils. This is a fact of our structure and othing is gained by recommending it as an ideal truth, nd equally nothing is gained by attributing to intellect

an intrinsic relationship to pure truth for its own sak
or bare fact on its own account. The first method en
courages dogma, and the second expresses a myth. Th
love of knowledge for its own sake is an ideal of morals
it is an integral condition of the wisdom that rightl
conceives and effectually pursues the good. For wisdo
as to ends depends upon acquaintance with condition
and means, and unless the acquaintance is adequate an
fair, wisdom becomes a sublimated folly of self-deceptio

Denial of an inherent relation of mind to truth or fac
for its own sake, apart from insight into what the fact o
truth exacts of us in behavior and imposes upon us i
joy and suffering; and simultaneous affirmation tha
devotion to fact, to truth, is a necessary moral demand
involve no inconsistency. Denial relates to natura
events as independent of choice and endeavor; affirma
tion relates to choice and action. But choice and th
reflective effort involved in it are themselves such con
tingent events and so bound up with the precarious un
certainty of other events, that philosophers have to
readily assumed that metaphysics, and science of fac
and truth, are themselves wisdom, thinking thus t
avoid the necessity of either exercising or recognizin
choice. The consequence is that conversion of un
avowed morals or wisdom into cosmology, and into
metaphysics of nature, which was termed in the la
chapter *the* philosophic fallacy. It supplies the fo
mula of the technique by which thinkers have relegate
the uncertain and unfinished to an invidious state
unreal being, while they have systematically exalted th
assured and complete to the rank of true Being.

Upon the side of wisdom, as human beings interested
n good and bad things in their connection with human
onduct, thinkers are concerned to mitigate the instability
f life, to introduce moderation, temper and economy,
nd when worst comes to worst to suggest consola-
ons and compensations. They are concerned with
endering more stable good things, and more unstable
ad things; they are interested in how changes may be
urned to account in the consequences to which they
ontribute. The facts of the ungoing, unfinished and
mbiguously potential world give point and poignancy
o the search for absolutes and finalities. Then when
hilosophers have hit in reflection upon a thing which is
ably good in quality and hence worthy of persistent
nd continued choice, they hesitate, and withdraw from
he effort and struggle that choice demands:—namely,
om the effort to give it some such stability in observed
istence as it possesses in quality when thought of.
hus it becomes a refuge, an asylum for contemplation,
a theme for dialectical elaboration, instead of an ideal
o inspire and guide conduct.

Since thinkers claim to be concerned with knowledge
existence, rather than with imagination, they have to
ake good the pretention to knowledge. Hence they
ansmute the imaginative perception of the stably good
ject into a definition and description of true reality
contrast with lower and specious existence, which,
ing precarious and incomplete, alone involves us in the
cessity of choice and active struggle. Thus they
move from actual existence the very traits which
nerate philosophic reflection and which give point and
aring to its conclusions. In briefest formula, "reality"

becomes what we wish existence to be, after we have analyzed its defects and decided upon what would remove them; "reality" is what existence would be if our reasonably justified preferences were so completely established in nature as to exhaust and define its entire being and thereby render search and struggle unnecessary. What is left over, (and since trouble, struggle, conflict, and error still empirically exist, something *is* left over) being excluded by definition from full reality is assigned to a grade or order of being which is asserted to be metaphysically inferior; an order variously called appearance, illusion, mortal mind, or the merely empirical, against what really and truly is. Then the problem of metaphysics alters: instead of being a detection and description of the generic traits of existence, it becomes an endeavor to adjust or reconcile to each other two separate realms of being. Empirically we have just what we started with: the mixture of the precarious and problematic with the assured and complete. But a classificatory device, based on desire and elaborated in reflective imagination, has been introduced by which the two traits are torn apart, one of them being labelled reality and the other appearance. The genuinely moral problem of mitigating and regulating the troublesome factor by active employment of the stable factor then drops out of sight. The dialectic problem of logical reconciliation of two notions has taken its place.

The most widespread of these classificatory devices, the one of greatest popular appeal, is that which divides existence into the supernatural and the natural. Men may fear the gods but it is axiomatic that the gods have nothing to fear. They lead a life of untroubled serenity

e life that pleases them. There is a long story between e primitive forms of this division of objects of experi- ce and the dialectical imputation to the divine of nipotence, omniscience, eternity and infinity, in con- st with the attribution to man and experienced nature finitude, weakness, limitation, struggle and change. t in the make-up of human psychology the later tory is implicit in the early crude division. One lm is the home of assured appropriation and posses- n; the other of striving, transiency and frustration. w many persons are there today who conceive that y have disposed of ignorance, struggle and disappoint- nt by pointing to man's "finite" nature—as if finitude nifies anything else but an abstract classificatory ming of certain concrete and discriminable traits of ture itself—traits of nature which generate ignorance, itrary appearance and disappearance, failure and iving. It pleases man to substitute the dialectic rcise of showing how the "finite" can exist with or hin the "infinite" for the problem of dealing with the ntingent, thinking to solve the problem by distin- shing and naming its factors. Failure of the exercise certain, but the failure can be flourished as one more of of the finitude of man's intellect, and the need- sness because impotency of endeavor of "finite" atures to attack ignorance and oppressive fatalities. sdom then consists in administration of the temporal, te and human in its relation to the eternal and in- te, by means of dogma and cult, rather than in regula- n of the events of life by understanding of actual nditions.

It does not demand great ingenuity to detect th inversion here. The starting point is precisely th existing mixture of the regular and dependable and th unsettled and uncertain. There are a multitude c recipes for obtaining a vicarious possession of the stabl and final without getting involved in the labor and pai of intellectual effort attending regulation of the condi tions upon which these fruits depend.

This situation is worthy of remark as an exemplifica tion of how easy it is to arrive at a description of exis tence via a theory of wisdom, of reflective insight int goods. It has a direct bearing upon a metaphysica doctrine which is not popular, like the division into th supernatural, and natural, but which is learned an technical. The philosopher may have little esteem fo the crude forms assumed by the popular metaphysics c earth and heaven, of God, nature, and man. But th philosopher has often proceeded in a manner analogou to that which resulted in this popular metaphysic some of the most cherished metaphysical distinctior seem to be but learned counterparts, dependent upo an elaborate intellectual technique, for these rough, crud notions of supernatural and natural, divine and humar in popular belief. I refer to such things as the Platon division into ideal archetypes and physical events; th Aristotelian division into form which is actuality ar matter which is potential, when that is understood as distinction of ranks of reality; the noumenal things, thing in-themselves of Kant in contrast with natural objec as phenomenal; the distinction, current among conter porary absolute idealists, of reality and appearance.

The division however is not confined to philosophers
th leanings toward spiritualistic philosophies. There
some evidence that Plato got the term Idea, as a name
r essential form, from Democritus. Whether this be
e case or no, the Idea of Democritus, though having a
dically diverse structure from the Platonic Idea, had
e same function of designating a finished, complete,
able, wholly unprecarious reality. Both philosophers
aved solidity and both found it; corresponding to the
atonic phenomenal flux are the Democritean things
they are in custom or ordinary experience: corre-
onding to the ideal archetypes are substantial indi-
sible atoms. Corresponding, again to the Platonic
eory of Ideas is the modern theory of mathematical
ructures which are alone independently real, while
e empirical impressions and suggestions to which they
ve rise is the counterpart of his realm of phenomena.
Apart from the materialistic and spirtualistic schools,
ere is the Spinozistic division into attributes and modes;
e old division of essence and existence, and its modern
unterpart subsistence and existence. It is impossible
force Mr. Bertrand Russell into any one of the pigeon-
les of the cabinet of conventional philosophic schools.
t moral, or philosophical, motivation is obvious in his
taphysics when he says that mathematics takes us
nto the region of absolute necessity, to which not only
e actual world but every possible world must conform."
deed with his usual lucidity, he says, mathematics
nds a habitation eternally standing, where our ideals
e fully satisfied and our best hopes are not thwarted."
hen he adds that contemplation of such objects is the
hief means of overcoming the terrible sense of impo-

tence, of weakness, of exile amid hostile power, which is to apt to result from acknowledging the all but omnipotenc of alien forces," the presence of moral origin is explici

No modern thinker has pointed out so persuasively Santayana that "every phase of the ideal world emanat from the natural," that "sense, art, religion, societ express nature exuberantly." And yet unless one rea him wrong, he then confounds his would-be disciples an confuses his critics by holding that nature is *truly* pr sented only in an esthetic contemplation of essenc reached by physical science, an envisagement reache through a dialectic which "is a transubstantiation matter, a passage from existence to eternity." Th passage moreover is so utter that there is no road bac The stable ideal meanings which are the fruit of natu are forbidden, in the degree in which they are its highe and truest fruits, from dropping seeds in nature to i further fructification.

The perception of genetic continuity between th dynamic flux of nature and an eternity of static ide forms thus terminate in a sharp division, in reiteration the old tradition. Perhaps it is a caricature to say th the ultimate of reason is held to be ability to beho nature as a complete mechanism which generates an sustains the beholding of the mechanism, but the caric ture is not wilful. If the separation of contingency an necessity is abandoned, what is there to exclude a beli that science, while it is grasp of the regular and stab mechanism of nature, is also an organ of regulating an enriching, through its own expansion, the more ex berant and irregular expressions of nature in huma intercourse, the arts, religion, industry, and politics?

To follow out the latter suggestion would take us to a theme reserved for later consideration. We are here concerned with the fact that it is the intricate mixture of the stable and the precarious, the fixed and the unpredictably novel, the assured and the uncertain, in existence which sets mankind upon that love of wisdom which forms philosophy. Yet too commonly, although in a great variety of technical modes, the result of the search is converted into a metaphysics which denies or conceals from acknowledgment the very characters of existence which initiated it, and which give significance to its conclusions. The form assumed by the denial is, most frequently, that striking division into a superior true realm of being and lower illusory, insignificant or phenomenal realm which characterizes metaphysical systems as unlike as those of Plato and Democritus, St. Thomas and Spinoza, Aristotle and Kant, Descartes and Comte, Haeckel and Mrs. Eddy.

The same jumble of acknowledgment and denial attends the conception of Absolute Experience: as if any experience could be more absolutely experience than that which marks the life of humanity. This conception constitutes the most recent device for first admitting and then denying the combinedly stable and unstable nature of the world. Its plaintive recognition of our experience as finite and temporal, as full of error, conflict and contradiction, is an acknowledgment of the precarious uncertainty of the objects and connections that constitute nature as it emerges in history. Human experience however has also the pathetic longing for truth, beauty and order. There is more than the longing: there are moments of achievement. Experience exhibits ability

to possess harmonious objects. It evinces an ability within limits, to safeguard the excellent objects and to deflect and reduce the obnoxious ones. The concept of an absolute experience which is only and always perfect and good, first explicates these desirable implications of things of actual experience, and then asserts that they alone are real. The experienced occurrences which give poignancy and pertinency to the longing for a better world, the experimental endeavors and plans which make possible actual betterments within the objects of actual experience, are thus swept out of real Being into a limbo of appearances.

The notion of Absolute Experience thus serves as a symbol of two facts. One is the ineradicable union in nature of the relatively stable and the relatively contingent. The division of the movement and leadings of things which are experienced into two parts, such that one set constitutes and defines absolute and eternal experience, while the other set constitutes and defines finite experience, tells us nothing about absolute experience. It tells us a good deal about experience as it exists: namely, that it is such as to involve permanent and general objects of reference as well as temporally changing events; the possibility of truth as well as error; conclusive objects and goods as well as things whose purport and nature is determinable only in an indeterminate future. Nothing is gained—except the delights of a dialectic problem—in labelling one assortment absolute experience and the other finite experience. Since the appeal of the adherents of the philosophy of absolute and phenomenal experience is to a logical criterion, namely, to the implication in every judgment, however

roneous, of a standard of consistency which excludes
y possibility of contradictoriness, the inherent logical
ntradictions in the doctrine itself are worth noting.

In the first place, the contents as well as the form of
timate Absolute Experience are derived from and
sed upon the features of actual experience, the very
perience which is then relegated to unreality by the
preme reality derived from its unreality. It is "real"
st long enough to afford a spring-board into ultimate
ality and to afford a hint of the essential contents of the
ter and then it obligingly dissolves into mere appear-
ce. If we start from the standpoint of the Absolute
perience thus reached, the contradiction is repeated
m its side. Although absolute, eternal, all-compre-
nsive, and pervasively integrated into a whole so
gically perfect that no separate patterns, to say nothing
seams and holes, can exist in it, it proceeds to play
ragic joke upon itself—for there is nothing else to be
oled—by appearing in a queer combination of rags and
ttering gew-gaws, in the garb of the temporal, partial
d conflicting things, mental as well as physical, of
linary experience. I do not cite these dialectic con-
dictions as having an inherent importance. But the
t that a doctrine which avowedly takes logical con-
tence for its method and criterion, whose adherents
noteworthy for dialectic acumen in specific issues,
ould terminate in such thoroughgoing contradictions
y be cited as evidence that after all the doctrine is
rely engaged in an arbitrary sorting out of characters
things which in nature are always present in conjunc-
n and interpenetration.

The union of the hazardous and the stable, of the i
complete and the recurrent, is the condition of all e
perienced satisfaction as truly as of our predicamen
and problems. While it is the source of ignorance, err
and failure of expectation, it is the source of the delig
which fulfillments bring. For if there were nothing
the way, if there were no deviations and resistance
fulfillment would be at once, and in so being would fu
fill nothing, but merely be. It would not be in conne
tion with desire or satisfaction. Moreover when
fulfillment comes and is pronounced good, it is *judg*
good, distinguished and asserted, simply because it is
jeopardy, because it occurs amid indifferent and dive
gent things. Because of this mixture of the regul
and that which cuts across stability, a good object on
experienced acquires ideal quality and attracts dema
and effort to itself. A particular ideal may be an illusio
but having ideals is no illusion. It embodies features
existence. Although imagination is often fantastic it
also an organ of nature; for it is the appropriate pha
of indeterminate events moving toward eventualiti
that are now but possibilities. A purely stable wor
permits of no illusions, but neither is it clothed with idea
It just exists. To be good is to be better than; and the
can be no better except where there is shock a
discord combined with enough assured order to ma
attainment of harmony possible. Better objects wh
brought into existence are existent not ideal; they reta
ideal quality only retrospectively as commemorative
issue from prior conflict and prospectively, in contra
with forces which make for their destruction. Wat
that slakes thirst, or a conclusion that solves a proble

ıave ideal character as long as thirst or problem persists n a way which qualifies the result. But water that is ıot a satisfaction of need has no more ideal quality than vater running through pipes into a reservoir; a solution eases to be a solution and becomes a bare incident of xistence when its antecedent generating conditions of loubt, ambiguity and search are lost from its context. While the precarious nature of existence is indeed the ource of all trouble, it is also an indispensable condition of deality, becoming a sufficient condition when conjoined vith the regular and assured.

We long, amid a troubled world, for perfect being. We orget that what gives meaning to the notion of perfection s the events that create longing, and that, apart from hem, a "perfect" world would mean just an unchanging rute existential thing. The ideal significance of esthetic bjects is no exception to this principle. Their satisfying uality, their power to compose while they arouse, is not ependent upon definite prior desire and effort as is the ase with the ideally satisfying quality of practical and cientific objects. It is part of their peculiar satisfying uality to be gratuitous, not purchased by endeavor. The ontrast to other things of this detachment from toil and abor in a world where most realizations have to be bought, s well as the contrast to trouble and uncertainty, give sthetic objects their peculiar traits. If all things came o us in the way our esthetic objects do, none of them vould be a source of esthetic delight.

Some phases of recent philosophy have made much of eed, desire and satisfaction. Critics have frequently eld that the outcome is only recurrence to an older sub- ective empiricism, though with substitution of affections

and volitional states for cognitive sensory states. Bu need and desire are exponents of natural being. They ar if we use Aristotelian phraseology, actualizations of ir contingencies and incompletenesses; as such nature itse is wistful and pathetic, turbulent and passionate. Wer it not, the existence of wants would be a miracle. In world where everything is complete, nothing requires any thing else for its completion. A world in which event can be carried to a finish only through the coincidin assistance of other transitory events, is already necess tous, a world of begging as well as of beggarly element If human experience is to express and reflect this world it must be marked by needs; in becoming aware of th needful and needed quality of things it must project satis factions or completions. For irrespective of whether satisfaction is conscious, a satisfaction or non-satisfac tion is an objective thing with objective conditions. I means fulfillment of the demands of objective factors Happiness may *mark* an awareness of such satisfaction and it may *be* its culminating form. But satisfaction i not subjective, private or personal: it is conditioned b objective partialities and defections and made real b objective situations and completions.

By the same logic, necessity implies the precarious an contingent. A world that was all necessity would no be a world of necessity; it would just be. For in its being nothing would be necessary for anything else. Bu where some things are indigent, other things are necessar if demands are to be met. The common failure to note th fact that a world of complete being would be a worl in which necessity is meaningless is due to a rapid shi from one universe of discourse to another. First w

ostulate a whole of Being; then we shift to a part; now nce a "part" is logically dependent as such in its exis- nce and its properties, it is necessitated by other parts. ut we have unwittingly introduced contingency in the ery fact of marking off something as just a part. If e logical implications of the original notion are held to rmly, a part is already a part-of-a-whole. Its being hat it is, is not necessitated by the whole or by other arts: its being what it is, is just a name for the whole eing what it is. Whole and parts alike are but names for istence there as just what it is. But wherever we can y *if* so-and-so, then something else, there is necessity, ecause partialities are implied which are not just parts- -a-whole. A world of "ifs" is alone a world of "musts" -the "ifs" express real differences; the "musts" real con- ections. The stable and recurrent is needed for the ful- lment of the possible; the doubtful can be settled only rough its adaptation to stable objects. The necessary always necessary for, not necessary in and of itself; it is onditioned by the contingent, although itself a condition the full determination of the latter.

One of the most striking phases of the history of hilosophic thought is the recurrent grouping together unity, permanence (or "the eternal"), completeness nd rational thought, while upon another side full multi- icity, change and the temporal, the partial, defective, ense and desire. This division is obviously but another ase of violent separation of the precarious and unsettled om the regular and determinate. One aspect of it owever, is worthy of particular attention: the connection thought and unity. Empirically, all reflection sets ut from the problematic and confused. Its aim is to

clarify and ascertain. When thinking is successful, it career closes in transforming the disordered into th orderly, the mixed-up into the distinguished or placed, th unclear and ambiguous into the defined and unequivocal the disconnected into the systematized. It is empirically assured that the goal of thinking does not remain a mer ideal, but is attained often enough so as to render reasona ble additional efforts to achieve it.

In these facts we have, I think, the empirical basis o the philosophic doctrines which assert that reality is really and truly a rational system, a coherent whole of relation that cannot be conceived otherwise than in terms of in tellect. Reflective inquiry moves in each particular cas from differences toward unity; from indeterminate an ambiguous position to clear determination, from confusio and disorder to system. When thought in a given cas has reached its goal of organized totality, of definite rela tions of distinctly placed elements, its object is the ac cepted starting point, the defined subject matter, of furthe experiences; antecedent and outgrown conditions of dark ness and of unreconciled differences are dismissed as transitory state of ignorance and inadequate apprehen sions. Retain connection of the goal with the thinkin by which it is reached, and then identify it with tru reality in contrast with the merely phenomenal, and th outline of the logic of rational and "objective" idealism is before us. Thought like Being, has two forms, on real; the other phenomenal. It is compelled to take o *reflective* form, it involves doubt, inquiry and hypothesis because it sets out from a subject-matter conditioned b sense, a fact which proves that thought, intellect, is nc pure in man, but restricted by an animal organism tha

out one part linked with other parts, of nature. But
e conclusion of reflection affords us a pattern and
arantee of thought which is *constitutive;* one with the
tem of objective reality. Such in outline is the pro-
lure of all ontological logics.

A philosophy which accepts the denotative or empirical
thod accepts at full value the fact that reflective think-
; transforms confusion, ambiguity and discrepancy into
mination, definiteness and consistency. But it also
nts to the contextual situation in which thinking occurs.
notes that the starting point is the actually *problematic,*
d that the problematic phase resides in some actual
d specifiable situation.

It notes that the means of converting the dubious into
e assured, and the incomplete into the determinate, is
e of assured and established things, which are just as
pirical and as indicative of the nature of experienced
ngs as is the uncertain. It thus notes that thinking is
different in kind from the use of natural materials and
ergies, say fire and tools, to refine, re-order, and shape
ner natural materials, say ore. In both cases, there are
tters which as they stand are unsatisfactory and
ere are also adequate agencies for dealing with them
d connecting them. At no point or place is there any
mp outside empirical, natural objects and their rela-
ns. Thought and reason are not specific powers.
ey consist of the procedures intentionally employed in
e application to each other of the unsatisfactorily con-
ed and indeterminate on one side and the regular and
ble on the other. Generalizing from such observa-
ns, empirical philosophy perceives that thinking is a
ntinuous process of temporal re-organization within one

and the same world of experienced things, not a jump fro
the latter world into one of objects constituted once f
all by thought. It discovers thereby the empirical bas
of rational idealism, and the point at which it empirical
goes astray. Idealism fails to take into account th
specified or concrete character of the uncertain situatio
in which thought occurs; it fails to note the empirical
concrete nature of the subject-matter, acts, and tools b
which determination and consistency are reached;
fails to note that the conclusive eventual objects havi
the latter properties are themselves as many as th
situations dealt with. The conversion of the logic
reflection into an ontology of rational being is thus due
arbitrary conversion of an eventual natural function
unification into a causal antecedent reality; this in tu
is due to the tendency of the imagination working und
the influence of emotion to carry unification from a
actual, objective and experimental enterprise, limited
particular situations where it is needed, into an u
restricted, wholesale movement which ends in an a
absorbing dream.

The occurrence of reflection is crucial for dualist
metaphysics as well as for idealistic ontologies. R
flection occurs only in situations qualified by uncertaint
alternatives, questioning, search, hypotheses, tentati
trials or experiments which test the worth of thinking.
naturalistic metaphysics is bound to consider reflecti
as itself a natural event occurring *within* nature because
traits of the latter. It is bound to inference from the em
pirical traits of thinking in precisely the same way as th
sciences make inferences from the happening of sun
radio-activity, thunder-storms or any other natural even

Traits of reflection are as truly indicative or evidential of the traits of *other* things as are the traits of these events. A theory of the nature of the occurrence and career of a sun reached by denial of the obvious traits of the sun, or by denial that these traits are so connected with the traits of other natural events that they can be used as evidence concerning the nature of these other things, would hardly possess scientific standing. Yet philosophers, and strangely enough philosophers who call themselves realists, have constantly held that the traits which are characteristic of thinking, namely, uncertainty, ambiguity, alternatives, inquiring, search, selection, experimental reshaping of external conditions, do not possess the same existential character as do the objects of valid knowledge. They have denied that these traits are evidential of the character of the world within which thinking occurs. They have not, as realists, asserted that these traits are mere appearances; but they have often asserted and implied that such things are only personal or psychological in contrast with a world of objective nature. But the interests of empirical and denotative method and of naturalistic metaphysics wholly coincide. The world must actually be such as to generate ignorance and inquiry; doubt and hypothesis, trial and temporal conclusions; the latter being such that they develop out of existences which while wholly "real" are not as satisfactory, as good, or as significant, as those into which they are eventually re-organized. The ultimate evidence of genuine hazard, contingency, irregularity and indeterminateness in nature is thus found in the occurrence of thinking. The traits of natural existence which generate the fears and adorations of superstitious bar-

barians generate the scientific procedures of discipline civilization. The superiority of the latter does not con sist in the fact that they are based on "real" existence while the former depend wholly upon a human natur different from nature in general. It consists in the fac that scientific inquiries reach *objects* which are better because reached by method which controls them an which adds greater control to life itself, method whic mitigates accident, turns contingency to account, an releases thought and other forms of endeavor.

The conjunction of problematic and determinat characters in nature renders every existence, as well a every idea and human act, an experiment in fact, eve though not in design. To be intelligently experimenta is but to be conscious of this intersection of natura conditions so as to profit by it instead of being at it mercy. The Christian idea of this world and this life a a probation is a kind of distorted recognition of th situation; distorted because it applied wholesale to on stretch of existence in contrast with another, regarded a original and final. But in truth anything which ca exist at any place and at any time occurs subject to test imposed upon it by surroundings, which are only in par compatible and reinforcing. These surroundings tes its strength and measure its endurance. As we can dis course of change only in terms of velocity and accelera tion which involve relations to other things, so assertio of the permanent and enduring is comparative. Th stablest thing we can speak of is not free from condition set to it by other things. That even the solid eart mountains, the emblems of constancy, appear and di appear like the clouds is an old theme of moralists an

ɔets. The fixed and unchanged being of the Demo-
itean atom is now reported by inquirers to possess some
the traits of his non-being, and to embody a temporary
quilibrium in the economy of nature's compromises and
djustments. A thing may endure *secula seculorum* and
et not be everlasting; it will crumble before the gnawing
ɔoth of time, as it exceeds a certain measure. Every
istence is an event.

This fact is nothing at which to repine and nothing to
oat over. It is something to be noted and used. If it
discomfiting when applied to good things, to our friends,
ɔssessions and precious selves, it is consoling also to
ıow that no evil endures forever; that the longest lane
rns sometime, and that the memory of loss of nearest
ıd dearest grows dim in time. The eventful character
all existences is no reason for consigning them to the
alm of mere appearance any more than it is a reason for
ealizing flux into a deity. The important thing is
easure, relation, ratio, knowledge of the comparative
mpos of change. In mathematics some variables are
nstants in some problems; so it is in nature and life.
ıe rate of change of some things is so slow, or is so
ythmic, that these changes have all the advantages of
ıbility in dealing with more transitory and irregular
ppenings—if we know enough. Indeed, if any one
ing that concerns us is subject to change, it is fortunate
ıt all other things change. A thing "absolutely"
ıble and unchangeable would be out of the range of the
nciple of action and reaction, of resistance and leverage
well as of friction. Here it would have no applicabil-
, no potentiality of use as measure and control of
ıer events. To designate the slower and the regular

rhythmic events structure, and more rapid and irregular ones process, is sound practical sense. It expresses the function of one in respect to the other.

But spiritualistic idealism and materialism alike treat this relational and functional distinction as something fixed and absolute. One doctrine finds structure in a framework of ideal forms, the other finds it in matter. They agree in supposing that structure has some superlative reality. This supposition is another form taken by preference for the stable over the precarious and uncompleted. The fact is that all structure is structure *of* something; anything defined as structure is a character of *events*, not something intrinsic and *per se*. A set of traits is called structure, because of its limiting function in relation to other traits of events. A house has a structure; in comparison with the disintegration and collapse that would occur without its presence, this structure is fixed. Yet it is not something external to which the changes involved in building and using the house have to submit. It is rather an arrangement of changing events such that properties which change slowly, limit and direct a series of quick changes and give them an order which they do not otherwise possess. Structure is constancy of means, of things used for consequences, not of things taken by themselves or absolutely. Structure is what makes construction possible and cannot be discovered or defined except in some realized construction, construction being, of course, an evident order of changes. The isolation of structure from the changes whose stable ordering it is, renders it mysterious—something that is metaphysical in the popular sense of the word, a kind of ghostly queerness.

The "matter" of materialists and the "spirit" of lealists is a creature similar to the constitution of the nited States in the minds of unimaginative persons. bviously the real constitution is certain basic relation-ips among the activities of the citizens of the country; is a property or phase of these processes, so connected ith them as to influence their rate and direction of change. ut by literalists it is often conceived of as something xternal to them; in itself fixed, a rigid framework to which *ll* changes must accommodate themselves. Similarly hat we call matter is that character of natural events hich is so tied up with changes that are sufficiently rapid o be perceptible as to give the latter a characteristic ythmic order, the causal sequence. It is no cause or ource of events or processes; no absolute monarch; no rinciple of explanation; no substance behind or under-ing changes—save in that sense of substance in which a an well fortified with this world's goods, and hence le to maintain himself through vicissitudes of surround-gs, is a man of substance. The name designates a haracter in operation, not an entity.

That structure, whether of the kind called material or the kind summed up in the word mental, is stable or rmanent relationally and in its office, may be shown in nother way. There is no action without reaction; there no exclusively one-way exercise of conditioning power, mode of regulation that operates wholly from above to low or from within outwards or from without inwards. hatever influences the changes of other things is itself anged. The idea of an activity proceeding only in e direction, of an unmoved mover, is a survival of reek physics. It has been banished from science, but

remains to haunt philosophy. The vague and mysterio
properties assigned to mind and matter, the very co
ceptions of mind and matter in traditional thought, a
ghosts walking underground. The notion of matter a
tually found in the practice of science has nothing in co
mon with the matter of materialists—and almost ever
body is still a materialist as to matter, to which he mere
adds a second rigid structure which he calls mind. Th
matter of science is a character of natural events a
changes as they change; their character of regular a
stable order.

Natural events are so complex and varied that the
is nothing surprising in their possession of differe
characterizations, characters so different that they c
be easily treated as opposites.

Nothing but unfamiliarity stands in the way of thinki
of both mind and matter as different characters of natur
events, in which matter expresses their sequential orde
and mind the order of their meanings in their logic
connections and dependencies. Processes may be even
ful for functions which taken in abstract separation are
opposite poles, just as physiological processes eventua
in both anabolic and katabolic functions. The idea th
matter and mind are two sides or "aspects" of the sa
things, like the convex and the concave in a curve,
literally unthinkable.

A curve is an intelligible object and concave and conv
are defined in terms of this object; they are indeed b
names for properties involved in its meaning. We c
not start with convexity and concavity as two independe
things and then set up an unknown *tertium quid* to uni
two disparate things. In spite of the literal absurdity

he comparison, it may be understood however in a way vhich conveys an inkling of the truth. That to which ooth mind and matter belong is the complex of events hat constitute nature. This becomes a mysterious *ertium quid*, incapable of designation, only when mind nd matter are taken to be static structures instead of unctional characters. It is a plausible prediction that f there were an interdict placed for a generation upon he use of mind, matter, consciousness as nouns, and we vere obliged to employ adjectives and adverbs, conscious nd consciously, mental and mentally, material and hysically, we should find many of our problems much implified.

We have selected only a few of the variety of the llustrations that might be used in support of the idea that he significant problems and issues of life and philosophy concern the rate and mode of the conjunction of the precarious and the assured, the incomplete and the finished, the repetitious and the varying, the safe and sane and the hazardous. If we trust to the evidence of experienced things, hese traits, and the modes and tempos of their interaction with each other, are fundamental features of natural existence. The experience of their various consequences, according as they are relatively isolated, unhappily or happily combined, is evidence that wisdom, and hence that love of wisdom which is philosophy, is concerned vith choice and administration of their proportioned union. Structure and process, substance and accident, matter and energy, permanence and flux, one and many, continuity nd discreteness, order and progress, law and liberty, niformity and growth, tradition and innovation, rational vill and impelling desires, proof and discovery, the

actual and the possible, are names given to various phases of their conjunction, and the issue of living depends upon the art with which these things are adjusted to each other.

While metaphysics may stop short with noting and registering these traits, man is not contemplatively detached from them. They involve him in his perplexities and troubles, and are the source of his joys and achievements. The situation is not indifferent to man, because it forms man as a desiring, striving, thinking, feeling creature. It is not egotism that leads man from contemplative registration of these traits to interest in managing them, to intelligence and purposive art. Interest, thinking, planning, striving, consummation and frustration are a drama enacted by these forces and conditions. A particular choice may be arbitrary; this is only to say that it does not approve itself to reflection. But choice is not arbitrary, not in a universe like this one, a world which is not finished and which has not consistently made up its mind where it is going and what it is going to do. Or, if we call it arbitrary, the arbitrariness is not ours but that of existence itself. And to call existence arbitrary or by any moral name, whether disparaging or honorific, is to patronize nature. To assume an attitude of condescension toward existence is perhaps a natural human compensation for the straits of life. But it is an ultimate source of the covert, uncandid and cheap in philosophy. This compensatory disposition it is which forgets that reflection exists to guide choice and effort. Hence its love of wisdom is but an unlaborious transformation of existence by dialectic, instead of an opening and enlarging of the ways of nature in man. A true wisdom,

evoted to the latter task, discovers in thoughtful ob-
ervation and experiment the method of administering the
nfinished processes of existence so that frail goods shall
e substantiated, secure goods be extended, and the pre-
arious promises of good that haunt experienced things
e more liberally fulfilled.

CHAPTER THREE

Nature, Ends and Histories

Human experience in the large, in its coarse and con
spicuous features, has for one of its most striking feature
preoccupation with direct enjoyment, feasting and festivi
ties; ornamentation, dance, song, dramatic pantomine
telling yarns and enacting stories. In comparison wit
intellectual and moral endeavor, this trait of experienc
has hardly received the attention from philosophers tha
it demands. Even philosophers who have conceived tha
pleasure is the sole motive of man and the attainment o
happiness his whole aim, have given a curiously sobe
drab, account of the working of pleasure and the searc
for happiness. Consider the utilitarians how they toile
spun and wove, but who never saw man arrayed in joy a
the lilies of the field. Happiness was to them a matter o
calculation and effort, of industry guided by mathematica
book-keeping. The history of man shows however tha
man takes his enjoyment neat, and at as short range a
possible.

Direct appropriations and satisfactions were prior t
anything but the most elementary and exigent prudenc
just as the useful arts preceeded the sciences. The bod
is decked before it is clothed. While homes are sti
hovels, temples and palaces are embellished. Luxurie
prevail over necessities except when necessities can b
festally celebrated. Men make a game of their fishin
and hunting, and turn to the periodic and disciplinar
labor of agriculture only when inferiors, women and slave

cannot be had to do the work. Useful labor is, whenever possible, transformed by ceremonial and ritual accompaniments, subordinated to art that yields immediate enjoyment; otherwise it is attended to under the compulsion of circumstance during abbreviated surrenders of leisure. For leisure permits of festivity, in revery, ceremonies and conversation. The pressure of necessity is, however, never wholly lost, and the sense of it led men, as if with uneasy conscience at their respite from work, to impute practical efficacy to play and rites, endowing them with power to coerce events and to purchase the favor of rulers of events.

But it is possible to magnify the place of magical exercise and superstitious legend. The primary interest lies in staging the show and enjoying the spectacle, in giving play to the ineradicable interest in stories which illustrate the contingencies of existence combined with happier endings for emergencies than surrounding conditions often permit. It was not conscience that kept men loyal to cults and rites, and faithful to tribal myths. So far as it was not routine, it was enjoyment of the drama of life without the latter's liabilities that kept piety from decay. Interest in rites as means of influencing the course of things, and the cognitive or explanation office of myths were hardly more than an embroidery, repeating in pleasant form the pattern which inexpugnable necessities imposed upon practice. When rite and myth are spontaneous rehearsal of the impact and career of practical needs and doings, they must also seem to have practical force. The political significance of July Fourth, 1776, is perhaps renewed by the juvenile celebrations of Independence Day, but this effect hardly accounts for the fervor of

the celebration. Any excuse serves for a holiday and the more the holiday is decked out with things that contrast with the pressure of workaday life while re-enacting its form, the more a holiday it is. The more unrestrained the play of fancy the greater the contrast. The supernatural has more thrills than the natural, the customary; holidays and holy-days are indistinguishable. Death is an occasion for a wake, and mourning is acclaimed with a board of funeral meats.

Reflected upon, this phase of experience manifests objects which are final. The attitude involved in their appreciation is esthetic. The operations entering into their production is fine art, distinguished from useful art. It is dangerous however to give names, especially in discourse that is far aloof from the things named—direct enjoyment of the interplay of the contingent and the effective, purged of practical risks and penalties. Esthetic, fine art, appreciation, drama have an eulogistic flavor. We hesitate to call the penny-dreadful of fiction artistic, so we call it debased fiction or a travesty on art. Most sources of direct enjoyment for the masses are not art to the cultivated, but perverted art, an unworthy indulgence. Thus we miss the point. A passion of anger, a dream, relaxation of the limbs after effort, swapping of jokes, horse-play, beating of drums, blowing of tin whistles, explosion of firecrackers and walking on stilts, have the same quality of immediate and absorbing finality that is possessed by things and acts dignified by the title of esthetic. For man is more preoccupied with enhancing life than with bare living; so that a sense of living when it attends labor and utility is borrowed not intrinsic, having been generated in those periods of relief when activity was dramatic.

To say these things is only to say that man is naturally more interested in consummations than he is in preparations; and that consummations have first to be hit upon spontaneously and accidentally—as the baby gets food and all of us are warmed by the sun—before they can be objects of foresight, invention and industry. Consciousness so far as it is not dull ache and torpid comfort is a thing of the imagination. The extensions and transformations of existence generated in imagination may come at last to attend work so as to make it significant and agreeable. But when men are first at the height of business, they are too busy to engage either in fancy or reflective inquiry. At the outset the hunt was enjoyed in the feast, or in the calm moments of shaping spears, bows and arrows. Only later was the content of these experiences carried over into hunting itself, so that even its dangers might be savored. Labor, through its structure and order, lends play its pattern and plot; play then returns the loan with interest to work, in giving it a sense of beginning, sequence and climax. As long as imagined objects are satisfying, the logic of drama, of suspense, thrill and success, dominates the logic of objective events. Cosmogonies are mythological not because savages indulge in defective scientific explanations, but because objects of imagination are consummatory in the degree in which they exuberantly escape from the pressure of natural surroundings, even when they re-enact its crises. The congenial is first form of the consistent.

As Goldenweiser says, if supernaturalism prevails in early culture it is largely because, "the phantasmagoria of supernaturalism is esthetically attractive, it has beauty of thought and form and of movement, it abounds in delight-

ful samples of logical coherence, and is full of fascination for the creator, the systematizer and the beholder." And it is safe to add, that the esthetic character of logical coherence rather than its tested coherence with fact is that which yields the delight. Again speaking of the place of ceremonialism in early culture, Goldenweiser well characterizes it as a kind of "psychic incandescence;" because of its presence, there is "no cooling of the ever glowing mass (the conglomerate of customs) no flagging of the emotions, no sinking of the cultural associations to the more precarious level of purely ideational connections."

Modern psychiatry as well as anthropology have demonstrated the enormous rôle of symbolism in human experience. The word symbolism, however, is a product of reflection upon direct phenomena, not a description of what happens when so-called symbols are potent. For the feature which characterizes symbolism is precisely that the thing which later reflection calls a symbol is not a symbol, but a direct vehicle, a concrete embodiment, a vital incarnation. To find its counterpart we should betake ourselves not to signal flags which convey information, ideas and direction, but to a national flag in moments of intense emotional stir of a devout patriot. Symbolism in this sense dominates not only all early art and cult but social organization as well. Rites, designs, patterns are all charged with a significance which we may call mystic, but which is immediate and direct to those who have and celebrate them. Be the origin of the totem what it may, it is not a cold, intellectual sign of a social organization; it is that organization made present and visible, a centre of emotionally charged behavior. It is not otherwise with the symbolism uncovered in dreams and

eurotic states by psychological analysis. Such symbols re not indicative or intellectual signs; they are condensed ıbstitutes of actual things and events, which embody ctual things with more direct and enhanced import than o the things themselves with their distractions, imposi- ons, and irrelevances. Meanings are intellectually dis- ɔrted and depressed, but immediately they are height- ıed and concentrated.

Jesperson speaks of the origin of language in similar erms. He says that many linguistic philosophers appear ɔ "imagine our primitive ancestors after their own image s serious and well meaning men, endowed with a large ıare of common sense. . . . . They leave you ith the impression that these first framers of speech ere sedate citizens with a strong interest in the purely usiness and matter of fact aspects of life." But Jesper- ɔn finds that the prosaic side of early culture was capable nly "of calling forth short monosyllabic interjections; ıey are the most immutable portions of language, and emain now at essentially the same standpoint as thous- nds of years ago." He concludes that the "genesis of nguage is found . . . . in the poetic side of life; ıe source of speech is not gloomy seriousness, but merry lay and youthful hilarity." And no one would deny, I ıppose that literature rather than business and science as developed and fixed our present linguistic resources. It would be difficult to find a fact more significant of the aits of nature, more instructive for a naturalistic meta- hysics of existence, than this cleavage of the things of uman experience into actual but hard objects, and ıjoyed but imagined objects. One might think that hilosophers in their search for some datum that possesses

properties that put it beyond doubt, might have directe
their attention to this direct phase of experience, in whic
objects are not a matter of sensations, ideas, beliefs
knowledge, but are something had and enjoyed. A
that "self-evidence" can intelligibly mean is obviousnes
of presence; commonplaces like human interest in th
things of sport and celebration are the most conspicuousl
obvious of all. In comparison, the "self-evident" thing
of philosophers are recondite and technical.

The other most self-evident thing in experience is us
ful labor and its coercive necessity. As direct appreci
tive enjoyment exhibits things in their consummator
phase, labor manifests things in their connections
things with one another, in efficiency, productivity, fu
thering, hindering, generating, destroying. From th
standpoint of enjoyment a thing is what it directly do
for us. From that of labor a thing is what it will do t
other things—the only way in which a tool or an obstac
can be defined. Extraordinary and subtle reasons hav
been assigned for belief in the principle of causatio
Labor and the use of tools seem, however, to be a sufficie
empirical reason: indeed, to be the only empirical even
that can be specifically pointed to in this connectio
They are more adequate grounds for acceptance of beli
in causality than are the regular sequences of nature
than a category of reason, or the alleged fact of will. Th
first thinker who proclaimed that every event is effect
something and cause of something else, that every parti
ular existence is both conditioned and condition, merel
put into words the procedure of the workman, convertin
a mode of practice into a formula. External regularit
is familiar, customary, taken for granted, not thought o

mbodied in thoughtless routine. Regularity, orderly equence, in productive labor presents itself to thought as controlling principle. Industrial arts are the type-orms of experience that bring to light the sequential onnections of things with one another.

In contrast, the enjoyment (with which suffering is to e classed) of things is a declaration that natural existnces are not mere passage ways to another passage way, nd so on *ad infinitum*. Thinkers interested in esthetic xperience are wont to point out the absurdity of the idea hat things are good or valuable only for something else; hey dwell on the fact vouchsafed by esthetic appreciation hat there are things that have their goodness or value in hemselves, which are not cherished for the sake of anyhing else. These philosophers usually confine this obseration however to human affairs isolated from nature, which they interpret exclusively in terms of labor, or ausal connections. But in every event there is somehing obdurate, self-sufficient, wholly immediate, neither relation nor an element in a relational whole, but terminal and exclusive. Here, as in so many other matters, naterialists and idealists agree in an underlying metahysics which ignores in behalf of relations and relational ystems, those irreducible, infinitely plural, undefinable nd indescribable qualities which a thing must *have* in rder to be, and in order to be capable of becoming the ubject of relations and a theme of discourse. Immediacy f existence is ineffable. But there is nothing mystical bout such ineffability; it expresses the fact that of direct xistence it is futile to say anything to one's self and mpossible to say anything to another. Discourse can ut intimate connections which if followed out may lead

one to *have* an existence. Things in their immediacy ar unknown and unknowable, not because they are remot or behind some impenetrable veil of sensation of ideas but because knowledge has no concern with them. Fo knowledge is a memorandum of conditions of their appear ance, concerned, that is, with sequences, coexistences relations. Immediate things may be *pointed to* by words but not described or defined. Description when it occur is but a part of a circuitous method of pointing or denot ing; index to a starting point and road which if taken may lead to a direct and ineffable presence. To the em pirical thinker, immediate enjoyment and suffering are the conclusive exhibition and evidence that nature has its finalities as well as its relationships.

Many modern thinkers, influenced by the notion tha knowledge is the only mode of experience that grasps things, assuming the ubiquity of cognition, and noting that immediacy or qualitative existence has no place in authentic science, have asserted that qualities are always and only states of consciousness. It is a reasonable belief that there would be no such thing as "consciousness" if events did not have a phase of brute and unconditioned "isness," of being just what they irreducibly are. Con sciousness as sensation, image and emotion is thus a par ticular case of immediacy occurring under complicated conditions. And also without immediate qualities those relations with which science deals, would have no footing in existence and thought would have nothing beyond itself to chew upon or dig into. Without a basis in qualitative events, the characteristic subject-matter of knowledge would be algebraic ghosts, relations that do not relate. To dispose of things in which relations terminate by call-

ng them elements, is to discourse within a relational nd logical scheme. Only if elements are more than just lements in a whole, only if they have something qualitaively their own, can a relational system be prevented rom complete collapse.

The Greeks were more naïve than we are. Their hinkers were as much dominated by the esthetic characers of experienced objects as modern thinkers are by heir scientific and economic (or relational) traits. Conequently they had no difficulty in recognizing the imortance of qualities and of things inherently closed or nal. They thought of mind as a realization of natural xistence or a participation in it. Thus they were saved rom the epistemological problem of how things and mind, efined antithetically, can have anything to do with each ther. If existence in its immediacies could speak it ould proclaim, "I may *have* relatives but *I* am not elated." In esthetic objects, that is in all immediately njoyed and suffered things, in things directly possessed, ey thus speak for themselves; Greek thinkers heard eir voice.

Unfortunately however, these thinkers were not connt to speak as artists, of whom they had a low opinion. nce they were thinkers, aiming at truth or knowledge, ey put art on a lower plane than science; and the only njoyment they found worth serious attention was that objects of thought. In consequence they formulated doctrine in which the esthetic and the rational are consed on principle, and they bequeathed the confusion an intellectual tradition to their successors. Aristotle oke more truly than he was aware when he said that ilosophy began in leisure "when almost all the neces-

saries and things that make for comfort and recreatio were present." For it was philosophic, rather than scien tific "knowledge" which thus began. Philosophy was telling of the story of nature after the style of all congeni stories, a story with a plot and climax, given such cohe ent properties as would render it congenial to mind demanding that objects satisfy logical canons.

Objects are certainly none the worse for having wond and admiration for their inspiration and art for the medium. But these objects are distorted when the affiliation with the epic, temple and drama is denied, an there is claimed for them a rational and cosmic statu independent of piety, drama and story. In the class philosophy of Greece the picture of the world that wa constructed on an artistic model proferred itself as bein the result of intellectual study. A story composed in th interests of a refined type of enjoyment, ordered by th needs of consistency in discourse, or dialectic, becam cosmology and metaphysics. Its authors took towar art and rite much the same sort of superior attitude tha the modern esthete takes to vulgar forms of esthet satisfaction. A claim for superiority in subject matt and mode of artistic treatment was indeed legitimat but a claim was made for difference in kind. Art was a embellished imitation of the everyday or empirical affai of life in their natural setting; philosophy was science, a envisagement of realities behind all copies, all phenomen or a grasp of essences within them forming their val substance. The delight attending the insight was attri uted to the final intrinsic dignity of the cosmic objec perceived by reason, instead of being frankly recogniz to be due to a selection and arrangement of thin with a view to enhancement of tranquil enjoyment.

Devotion to rites, stories and revery springs on its magical side from practical desire to control the contingent; but in larger measure it embodies the happiness that attends the sense of successful issue from the uncertainly hazardous. Imagination is primarily dramatic, rather than lyric, whether it takes the form of the play enacted on the stage, of the told story or silent soliloquy. The constant presence of instability and trouble gives depth and poignancy to the situations in which are pictured their subordination to final issues possessed of calm and certainty. To re-enact the vicissitudes, crises and tragedies of life under conditions that deprive them of their overt dangers, is the natural rôle of "consciousness," which is tamed to respect actualities only when circumstance enforces the adoption of the method of labor, a discipline that is fortunate if it retain some of the liberation from immediate exigencies which characterizes dramatic imagination.

Modern critics of esthetics have criticized the conception of Plato and Aristotle that art is imitation. But in its original statement, this conception was a description of the observed facts of drama, music and epic rather than theoretical interpretation. For these thinkers were not so stupid as to hold that art is an imitation of inert things; they held that it was a mimesis of the critical and climatic behavior of natural forces within human career and destiny. Such a reproduction is naturally in a new and liberal medium; it permits idealization, but the idealization is of natural events. It is self-sufficing, an end in itself, while the events seem to exist only to render the perfection of an idealized reproduction possible and pertinent. Resort to esthetic objects is the spontaneous

human escape and consolation in a trying and difficult world. A world that consisted entirely of stable objects directly presented and possessed would have no esthetic qualities; it would just be, and would lack power to satisfy and to inspire. Objects are actually esthetic when they turn hazard and defeat to an issue which is above and beyond trouble and vicissitude. Festal celebration and consummatory delights belong only in a world that knows risk and hardship.

Greek philosophy as well as Greek art is a memorial of the joy in what is finished, when it is found amid a world of unrest, struggle, and uncertainty in what, since it is ended, does not commit us to the uncertain hazards of what is still going on. Without such experiences as those of Greek art it is hardly conceivable that the craving for the passage of change into rest, of the contingent, mixed and wandering into the composed and total, would have found a model after which to design a universe like the cosmos of Platonic and Aristotelian tradition. Form was the first and last word of philosophy because it had been that of art; form is change arrested in a prerogative object. It conveys a sense of the imperishable and timeless, although the material in which it is exemplified is subject to decay and contingency. It thus conveys an intimation of potentialities completely actualized in a happier realm, where events are not events, but are arrested and brought to a close in an eternal self-sustaining activity. Such a realm is intrinsically one of secure and self-possessed meaning. It consists of objects of immediate enjoyment hypostasized into transcendent reality. Such was the conversion of Greek esthetic contemplation effected by Greek reflection.

The technical structure of the resulting metaphysics is amiliar. The cosmically real is one with the finished, he perfect, or wholly done. Even with Aristotle, a oldly defining theory, called metaphysics, of the traits f Being, becomes a theology, or science of ultimate and ternal reality to which only ecstatic predicates are at-ributable. It consists of pure forms, self-sufficient, self-nclosed and self-sustaining; self-movement or life at ternal full-tide. Forms are ideal, and the ideal is the ational apprehended by reason. The material for this oint of view was found empirically in what is consum-natory and final; and the dominion exercised by art in reek culture fostered and enhanced attention to objects f this immediately enjoyed kind. To the spectator, rtistic objects are given; they need only to be envisaged; reek reflection, carried on by a leisure class in the inter-st of liberalizing leisure, was preëminently that of the pectator, not that of the participator in processes of pro-uction. Labor, production, did not seem to create form, dealt with matter or changing things so as to furnish an ccasion for incarnation of antecedent forms in matter. o artisans form is alien, unperceived and unenjoyed; bsorbed in laboring with material, they live in a world of hange and matter, even when their labors have an end in anifestation of form. Plato was so troubled by the nsequences of this ignorance of form on the part of all ho live in the world of practice, industrial and political, at he elaborated a plan by which their activities might e regulated by those who, above labor and entanglement change and practice, provide in laws forms to shape the abits of those who work. Aristotle escaped the dilemma y putting nature above art, and endowing nature with

skilled purpose that for the most part achieves ends o completions. Thus the rôle of the human artisan whethe in industry or politics became relatively negligible, an the miscarriages of human art a matter of relativ insignificance.

The Aristotelian conception of four-fold "causation" is openly borrowed from the arts, which for the artisa are utilitarian and menial, and are "fine" or liberal onl for the cultivated spectator who is possessed of leisure– that is, is relieved from the necessity of partaking labo riously in change and matter. Nature is an artist tha works from within instead of from without. Hence a change, or matter, is potentiality for finished objects Like other artists, nature first possesses the forms whic it afterwards embodies. When arts follow fixed models whether in making shoes, houses, or dramas, and when th element of individual invention in design is condemned a caprice, forms and ends are necessarily external to th individual worker. They preceded any particular realiza tion. Design and plan are anonymous and universa and carry with them no suggestion of a designing, purpo sive mind. Models are objectively given and have onl to be observed and followed. Thus there was no diff culty, such as one may feel to-day, in ascribing definit and regulative forms to the changes of nature, which ar actualized in objects that are finalities, closures of change The actualization in an organic body of the forms that ar found in things constitutes mind as the end of nature Their immediate possession and celebration constitute consciousness, as far as the idea of consciousness is foun in Greek thought.

This doctrine was not an arbitrary speculation; it lowed naturally from the fact that Greek thinkers were ortunate to find ready-made to hand and eye a realm of sthetic objects with traits of order and proportion, form nd finality. The arts were pursued upon the basis of fund of realized, objective and impersonal designs and lans, which were prior to individual devising and execu- ion rather than products of individual purpose and inven- ion. The philosophers did not create out of their own peculations, the idea of materials subdued to the accept- nce and manifestation of objective forms. They found he fact in the art of their period, translating it into an ntellectual formula. Philosophers were not the authors f an identification of objects informed with ideal order nd proportion with a final and arresting outcome of proc- sses of antecedent change. That identification was at east implicit in the operation of artisans. Nor were the hilosophers the originators of the idea that mental appro- riation of some objects is intrinsically a state of elevated atisfaction. That fact was given to them in the esthetic ulture of their civilization. What the philosophers re responsible for is a peculiar one-sided interpretation f these empirical facts, an interpretation, however, which as its roots in features, although less admirable ones, of Greek culture.

For the Greek community was marked by a sharp eparation of servile workers and free men of leisure, which meant a division between acquaintance with matters of fact and contemplative appreciation, be- tween unintelligent practice and unpractical intelli- gence, between affairs of change and efficiency—or instru- mentality—and of rest and enclosure—finality. Exper-

ience afforded therefore no model for a conception o experimental inquiry and of reflection efficacious in action In consequence, the sole notability, intelligibility, o nature was conceived to reside in objects that were ends since they set limits to change. Changing things were not capable of being known on the basis of relationship to one another, but only on the basis of their relationship to objects beyond change, because marking its limit, and immediately precious. The terminal objects lent changing objects the properties which made them knowable; such stability of character as they possessed was derived from the form of the end-objects toward which they moved. Hence an inherent appetition or nisus toward these terminal and static objects was attributed to them The whole scheme of cosmic change was a vehicle for attaining ends possessed of properties which caused them to be objects of attraction of all lesser things, rendering the latter uneasy and restless until they attained the end-object which constitutes their real nature. Thus an immediate contemplative possession and enjoyment of objects, dialectically ordered, was interpreted as defining both true knowledge and the highest end and good of nature. A doctrine of morals, of what is better in reflective choice, was thus converted into a metaphysics and science of Being, the moral aspect being disguised to the modern mind by the fact that the highest good was conceived esthetically, instead of in the social terms which upon the whole dominate modern theories of morality.

The doctrine that objects as ends are the proper objects of science, because they are the ultimate forms of real being, met its doom in the scientific revolution of the seventeenth century. Essences and forms were attacked

s occult; "final causes" were either wholly denied or legated to a divine realm too high for human knowledge. he doctrine of natural ends was displaced by a doctrine designs, ends-in-view, conscious aims constructed and tertained in individual minds independent of nature. escartes, Spinoza and Kant are upon this matter at ast in agreement with Bacon, Hume and Helvetius. ne imputation to natural events of cosmic appetition wards ends, the notion that their changes were to be derstood as efforts to reach a natural state of rest and rfection, were indicated as the chief source of sterility d fantasy in science; the syllogistic logic connected th the doctrine was discarded as verbal, polemical, and its best irrelevant to the subtle operations of nature; rpose and contingency were alike relegated to the purely man and personal; nature was evacuated of qualities d became a homogeneous mass differentiated by differ- ces of homogeneous motion in a homogeneous space. echanical relations, which Greek thought had rejected equivalent to the chaotic reign of pure accident, be- me the head corner-stone of the conception of law, of iformity and order. If ends were recognized at all, was only under the caption of design, and design was fined as conscious aim rather than as objective order d architechtonic form. Wherever the influence of odern physics penetrated, the classic theory became note, faded, factitious, with its assertion that natural anges are inherent movements toward objects which e their fulfillments or perfections, so that the latter are ie objects of knowledge, supplying the forms or charac- rs under which alone changes may be known. With e decay of this doctrine, departed also belief in cosmic

qualitative differences and kinds, so that of necessit
quality and immediacy had no recourse, expelled from ob
jective nature, save to take refuge in personal consciousnes

Is this reversal of classic theories of existence inevitable
Must belief in ends involved in nature itself be su
rendered, or be asserted only by means of a roundabou
examination of the nature of knowledge which startin
from conscious intent to know, finally infers that the un
verse is a vast, non-natural fulfillment of a conscious
intent? Or is there an ingredient of truth in ancient meta
physics which may be extracted and re-affirmed? Empir
cally, the existence of objects of direct grasp, possession
use and enjoyment cannot be denied. Empirically, things
are poignant, tragic, beautiful, humorous, settled, di
turbed, comfortable, annoying, barren, harsh, consolin
splendid, fearful; are such immediately and in their ow
right and behalf. If we take advantage of the wor
esthetic in a wider sense than that of application to th
beautiful and ugly, esthetic quality, immediate, fin
or self-enclosed, indubitably characterizes natural situa
tions as they empirically occur. These traits stand i
themselves on precisely the same level as colors, sound
qualities of contact, taste and smell. Any criterion tha
finds the latter to be ultimate and "hard" data wil
impartially applied, come to the same conclusion abou
the former. *Any* quality as such is final; it is at one
initial and terminal; just what it is as it exists. I
may be referred to other things, it may be treated as a
effect or as a sign. But this involves an extraneou
extension and use. It takes us beyond quality in i
immediate qualitativeness. If experienced things ar
valid evidence, then nature in having qualities with

tself has what in the literal sense must be called ends, erminals, arrests, enclosures.

It is dangerous to venture at all upon the use of the vord "ends" in connection with existential processes. Apologetic and theological controversies cluster about t and affect its signification. Barring this connotation, he word has an almost inexpugnable honorific flavor, so hat to assert that nature is characterized by ends, the nost conspicuous of which is the life of mind, seems ike engaging in an eulogistic, rather than an empirical ccount of nature. Something much more neutral than ny such implication is, however, meant. We constantly talk about things coming or drawing to a close; getting ended, finished, done with, over with. It is a commonplace that no *thing* lasts forever. We may be glad or we may be sorry but that is wholly a matter of the kind of history which is being ended. We may conceive he end, the close, as due to fulfillment, perfect attainment, to satiety, or to exhaustion, to dissolution, to something having run down or given out. Being an end may be indifferently an ecstatic culmination, a matter-of-fact consummation, or a deplorable tragedy. Which of these things a closing or terminal object is, has nothing to do with he property of being an end.

The genuine implications of natural ends may be brought out by considering beginnings instead of endings. To insist that nature is an affair of beginnings is to assert hat there is no one single and all-at-once beginning of everything. It is but another way of saying that nature s an affair *of* affairs, wherein each one, no matter how inked up it may be with others, has its *own* quality. It loes not imply that every beginning marks an advance or

improvement; as we sadly know accidents, diseases, wars lies and errors, begin. Clearly the fact and idea of beginning is neutral, not eulogistic; temporal, not absolute And since wherever one thing begins something else ends what is true of beginnings is true of endings. Popular fiction and drama shows the bias of human nature in favor of happy endings, but by being fiction and drama they show with even greater assurance that unhappy endings are natural events.

To minds inured to the eulogistic connotation of ends such a neutral interpretation of the meaning of ends as has just been set forth may seem to make the doctrine of ends a matter of indifference. If ends are only endings or closings of temporal episodes, why bother to call attention to ends at all, to say nothing of framing a theory of ends and dignifying it with the name of natural teleology? In the degree, however, in which the mind is weaned from partisan and ego-centric interest, acknowledgement of nature as a scene of incessant beginnings and endings presents itself as the source of philosophic enlightenment. It enables thought to apprehend causal mechanisms and temporal finalities as phases of the same natural processes instead of as competitors where the gain of one is the loss of the other. Mechanism is the order involved in any historic occurrence, capable of definition in terms of the order which various histories sustain to each other. Thus it is the instrumentality of control of any particular termination since a sequential order involves the last term.

The traditional conception of natural ends was to the effect that nature does nothing in vain; the accepted meaning of this phrase was that every change is for the

ake of something which does not change, occurring in its ehalf. Thus the mind started with a ready-made list f good things or perfections which it was the business of ature to accomplish. Such a view may verbally distinuish between something called efficient causation and omething else called final causation. But in effect the istinction is only between the causality of the master ho contents himself with uttering an order and the fficacy of the servant who actually engages in the physical ork of execution. It is only a way of attributing ultiate causality to what is ideal and mental—the directive rder of the master—, while emancipating it from the pposed degradation of physical labor in carrying it out, s well as avoiding the difficulties of inserting an immaterial ause within the material realm. But in a legitimate acount of ends as endings, all directional order resides in e sequential order. This no more occurs for the sake the end than a mountain exists for the sake of the peak hich is its end. A musical phrase has a certain close, t the earlier portion does not therefore exist for the sake the close as if it were something which is done away with hen the close is reached. And so a man is not an adult til after he has been a boy, but childhood does not exist r the sake of maturity.

By the nature of the case, causality, however it be fined, consists in the sequential order itself, and not in a st term which as such is irrelevant to causality, although may, of course be, in addition, an initial term in another quential order. The view held—or implied—by some echanists", which treats an initial term as if it had an herent generative force which it somehow emits and stows upon its successors, is all of a piece with the view

held by teleologists which implies that an end bring about its own antecedents. Both isolate an event fro the history in which it belongs and in which it has i character. Both make a factitiously isolated position i a temporal order a mark of true reality, one theory selec ing initial place and the other final place. But in fa causality is another name for the sequential order itsel and since this is an order of a history having a begi ning and end, there is nothing more absurd than setti causality over against either initiation or finality.

The same considerations permit a naturalistic inte pretation of the ideas of dynamic and static. Every e is as such static; this statement is but a truism; chan ing into something else, a thing is obviously transitiv not final. Yet the thing which is a close of one history always the beginning of another, and in this capacity t thing in question is transitive or dynamic. This stat ment also is tautology, for dynamic does not mean p sessed of "force" or capable of emitting it so as to stir other things and set them in motion; it means simp change in a connected series of events. The tradition view of force points necessarily to something transce dental, because outside of events, whether called God Will or The Unknowable. So the traditional view of t static points to something fixed and rigid, incapable change, and therefore also outside the course of things a consequently non-empirical. Empirically, however, th is a history which is a succession of histories, and in wh any event is at once both beginning of one course a close of another; is both transitive and static. The phr constantly in our mouths, "state of affairs" is accurat descriptive, although it makes sheer nonsense in b

he traditional spiritual and mechanistic theories. There re no changes that do not enter into an affair, *Res*, nd there is no affair that is not bounded and thereby narked off as a state or condition. When a state of ffairs is perceived, the perceiving-of-a-state-of-affairs is further state of affairs. Its subject-matter is a thing in he idiomatic sense of thing, *res*, whether a solar-system, stellar constellation, or an atom, a diversified and more r less loosely interconnection of events, falling within oundaries sufficiently definite to be capable of being pproximately traced. Such is the unbiased evidence of xperience in gross, and such in effect is the conclusion of ecent physics as far as a layman can see. For this rea-on, and not because of any unique properties of a separ-te kind of existence, called psychic or mental, every ituation or field of consciousness is marked by initiation, irection or intent, and consequence or import. What is nique is not these traits, but the property of awareness r perception. Because of this property, the initial stage s capable of being judged in the light of its probable ourse and consequence. There is anticipation. Each uccessive event being a stage in a serial process is both xpectant and commemorative. What is more precisely ertinent to our present theme, the terminal outcome hen anticipated (as it is when a moving cause of affairs s perceived) becomes an end-in-view, an aim, purpose, prediction usable as a plan in shaping the course of vents. In classic Greek thought, the perception of ends as simply an esthetic contemplation of the forms of ob-ects in which natural processes were completed. In most odern thought, it is an arbitrary creation of private ental operations guided by personal desire, the theoreti-

cal alternative being that they are finite copies of th fulfilled intentions of an infinite mind. In empirical fac they are projections of possible consequences; they ar ends-in-view. The in-viewness of ends is as much con ditioned by antecedent natural conditions as is percep tion of *contemporary* objects external to the organism, tree and stones, or whatever. That is, natural processes mus have actually terminated in specifiable consequence which give those processes definition and character, befor ends can be mentally entertained and be the objects o striving desire. In so far, we must side with Gree thought. But empirical ends-in-view are distinguishe in two important respects from ends as they are conceive in classic thought. They are not objects of contemplativ possession and use, but are intellectual and regulativ means, degenerating into reminiscences or dreams unles they are employed as plans within the state of affair And when they are attained, the objects which they inform are conclusions and fulfillments, *only* as these objects ar the consequence of prior reflection, deliberate choice an directed effort are they fulfillments, conclusions, compl tions, perfections. A natural end which occurs withou the intervention of human art is a terminus, a de fact boundary, but it is not entitled to any such honorif status of completions and realizations as classic meta physics assigned them.

When we regard conscious experience, that is to say the *object* and *qualities* characteristic of conscious life, as natural end, we are bound to regard *all* objects impartial as distinctive ends in the Aristotelian sense. We cannot pick or choose; when we do pick and choose we are obv ously dealing with practical ends—with objects and qua

ies that are deemed worthy of selection by reflective, eliberate choice. These "ends" are not the less natural, f we have an eye to the continuity of experienced objects ith other natural occurrences, but they are not ends ithout the intervention of a special affair, reflective sur-ey and choice. But popular thought, in accord with he Greek tradition, picks and chooses among all ends hose which it likes and honors, at the same time ignoring nd implicitly denying the act of choice. Like those who egard a happy escape from a catastrophe as a providen-al intervention, neglecting all who have not escaped, opular teleology regards *good* objects as natural ends, *ad* objects and qualities being regarded as mere acci-ents or incidents, regrettable mechanical excess or defect. opular teleology like Greek metaphysics, has accord-ngly been apologetic, justificatory of the beneficence of ature; it has been optimistic in a complacent way.

Primitive man like naïve common sense imputes ter-ninating qualities to nature—in which it follows a ound realistic metaphysics. But it also imputes to them he property of causal determination, an imputation ejected by science. Rejection by science does not prove hese qualities to be mere "subjective" or "private" ppearances; it only shows that they are termini, closings f serial events. Events that achieve and possess them re linked, mediatory, transitive, indicative, and the roper material of knowledge. From the standpoint of ausal sequence, or the order with which science is con-erned, qualities are superfluous, irrelevant and immater-al. We could never predict their occurrence from the illest acquaintance with the properties that form the bjects of knowledge as such.

From the standpoint of the latter, the relational order ends are abrupt and interruptive. Hence to a philosoph that takes the subject-matter of knowledge to be exclusiv and exhaustive—as so much of modern philosophy ha done—they form a most perplexing problem, a myster For with extrusive and superfluous status they combir the property of being permeating and absorbing. The alone, as we say, are of interest, and they are the cause taking interest in other things. For living creatures the form the natural platform for regarding other thing They are the basis, directly and indirectly, of activ response to things. As compared with them, other thing are obstacles and means of procuring and avoiding th occurrence of situations having them. When the wor "consciousness" is—as it often is—used for a short nam for the sum total of such immediate qualities as actual present themselves, it is the end or terminus of natur events. As such it is also gratuitous, superfluous ar inexplicable when reality is defined in terms of the rel tional objects of science.

By "ends" we also mean ends-in-view, aims, thin viewed after deliberation as worthy of attainment and evocative of effort. They are formed from objects take in their immediate and terminal qualities; objects on having occurred as endings, but which are not now existence and which are not likely to come into existen save by an action which modifies surroundings. Class metaphysics is a confused union of these two sense of end the primarily natural and the secondarily natural, practical, moral. Each meaning is intelligible, grounde legitimate in itself. But their mixture is one of the Gre Bads of philosophy. For it treats as natural ends apa

rom reflection just those objects that are worthy and xcellent to reflective choice. Popular teleology has un-nowingly followed the leadings that controlled Greek hought; spiritualistic quasi-theological metaphysics has onsciously adopted the latter's point of view.

The features of this confused metaphysics are: First, limination from the status of natural ends of all objects hat are evil and troublesome; Secondly, the grading of bjects selected to constitute natural ends into a fixed, nchangeable hierarchical order. Objects that possess nd import qualities of struggle, suffering and defeat are egarded not as ends, but as frustrations of ends, as ccidental and inexplicable deviations. Theology has esorted to an act of original sin to make their occurrence xplicable, Greek metaphysics resorted to the presence in ature of a recalcitrant, obdurate, factor. To this pro-incially exclusive view of natural termini, popular teleo-ogy adds a ranking of objects according to which some re more completely ends than others, until there is eached an object which is only end, never eventful and emporal—*the* end. The hierarchy is explicit in Greek hought: first, and lowest are vegetative ends, normal rowth and reproduction; second in rank, come animal nds, locomotion and sensibility; third in rank, are ideal nd rational ends, of which the highest is blissful contem-lative possession in thought of all the forms of nature. n this gradation, each lower rank while an *end* is also neans or preformed condition of higher ends. Empiri-al things, things of useful arts, belonging to the second lass but, affected by an adventitious mixture of thought, re ultimately instrumentalities potential for the life of ure rational possession of ideal objects. Modern teleo-

logies are much less succinct and definite, they agree however in the notion of rows of inferior ends which prepare for and culminate in something which is *the* end.

Such a classificatory enterprise is naturally consoling to those who enjoy a privileged status, whether as philosophers, as saints or scholars, and who wish to justify their special status. But its consoling apologetics should not blind us to the fact that to think of objects as more or less ends is nonsense. They either have immediate and terminal quality; or they do not: quality as such is absolute not comparative. A thing may be of some shade of blue when compared with some quality that is wanted and striven for; but its blue is not itself more or less blue nor than blueness, and so with the quality of being terminal and absorbing. Objects may be more or less absorptive and arresting and thus possess degrees of intensity with respect to finality. But this difference of intensity is not save as subject to reflective choice, a distinction in rank or class of finality. It applies to different toothaches as well as to different objects of thought; but it does not apply, inherently, to the difference between a tooth-ache and an ideal object—save that a thing like a tooth-ache is often possessed of greater intensity of finality. If we follow the clew of the latter fact, we shall probably conclude that search for pure and unalloyed finality carries us to inarticulate sensation and overwhelming passion. For such affairs are the best instances of things that are complete in themselves with no outleadings.

If then rational essences or meanings are better objects of contemplation than are seizures by sensory and passionate objects, it is not because the former are fulfillments of higher or more "real" antecedent processes

They are not graded on the basis of being lesser or greater actualizations. It is because they present themselves to reflective appraisal as more worthy to be striven for. And this rational character implies that the *things* which have the better qualities possess also transitiveness, instrumentality, as well as immediacy and finality. They are potential and productive. They lead somewhere, perhaps to other affairs having qualities to be envisaged and deeply meditated. If dialectic were not so esthetically enjoyable to some, it would never have played the role it has played in liberating man from the dominion of sensation and impulse. This shows that the esthetic object may be useful and an useful one esthetic, or that immediacy and efficacy[1] though distinguishable qualities are not disjoined existentially. But it is no reason for making contemplative knowledge or any other particular affair the highest of all natural ends. Whether the given or the deliberately constructed is a better or higher end is not a question of intrinsic quality, but a matter of reflectively determined judgment. It is conceivable that just because certain objects are immediately good, that which secures and extends their occurrence may itself become for reflective choice a supreme immediate good.

[1] To avoid misapprehension it should perhaps be explicitly stated the term "efficacy" employed here and elsewhere, does not imply an interpretation in terms of the old theory of something engaged in emitting force. It is used purely denotatively; it designates empirical position in a course of affairs having a specifiable ending; its meaning is defined not by any theory, but by such affairs as that to get a fire, a match is applied and that it is applied not to a stone but to paper or shavings. The words agency, instrumentality, causal condition, which appear frequently in these pages are to be similarly translated.

History is full of ingratitude. All existences are something more than products; they have qualities of their own and assert independent life. There is something of King Lear's daughters in all offspring. This ingratitude is reproachable only when it turns to deny its ancestry. That Plato and Aristotle should have borrowed from the communal objects of the fine arts, from ceremonies, worship and the consummatory objects of Greek culture, and should have idealized their borrowings into new objects of art is something to be thankful for. That, after having enforced the loan, they spurned the things from which they derived their models and criteria is not so admirable. This lack of piety concealed from them the poetic and religious character of their own constructions, and established in the classic Western philosophic tradition the notions that immediate grasp and incorporation of objects is knowledge; that things are placed in graded reality in accordance with their capacity to afford a cultivated mind such a grasp or beholding; and that the order of reality in Being is coincident with a predetermined rank of Ends.

If we recognize that all qualities directly had in conscious experience apart from use made of them, testify to nature's characterization by immediacy and finality, there is ground for unsophisticated recognition of use and enjoyment of things as natural, as belonging to the things as well as to us. *Things* are beautiful and ugly, lovely and hateful, dull and illuminated, attractive and repulsive. Stir and thrill in us is as much theirs as is length, breadth, and thickness. Even the utility of things, their capacity to be employed as means and agencies, is first of all not a relation, but a quality possessed; immediately

possessed, it is as esthetic as any other quality. If labor transforms an orderly sequence into a means of attaining ends, this not only converts a casual ending into a fulfillment, but it also gives labor an immediate quality of finality and consummation. Art, even fine art, is long, as well as a joy.

From the standpoint of control and utilization, the tendency to assign superior reality to causes is explicable. A "cause" is not merely an antecedent; it is that antecedent which if manipulated regulates the occurrence of the consequent. This is why the sun rather than night is the causal condition of day. Knowing that consequences will take care of themselves if conditions can be had and managed, an ineradicable natural pragmatism indulges in a cheap and short conversion, and conceives the cause as intrinsically more primary and necessary. This practical tendency is increased by the fact that time is a softener and dignifier; present troubles lose their acuteness when they are no longer present. Old times are proverbially the good old times, and history begins with a Garden of Paradise or a Golden Age. Good, being congenial, is held to be normal; and what is suffered is a deviation, creating the problem of evil. Thus the earlier gets moral dignity as well as practical superiority. (But in existence, or metaphysically, cause and effect are on the same level; they are portions of one and the same historic process, each having immediate or esthetic quality and each having efficacy, or serial connection. Since existence is historic it can be known or understood only as each portion is distinguished and related.) For knowledge "cause" and "effect" alike have a partial and truncated being. It is as much a part of the real being of atoms that they give rise

in time, under increasing complication of relationships to qualities of blue and sweet, pain and beauty, as that they have at a cross-section of time extension, mass, or weight.

The problem is neither psychological nor epistemological. It is metaphysical or existential. It is whether existence consists of events, or is possessed of temporal quality, characterized by beginning, process and ending. If so, the affair of later and earlier, however important it is for particular practical matters, is indifferent to a theory of valuation of existence. It is as arbitrary to assign complete reality to atoms at the expense of mind and conscious experience as it is to make a rigid separation between here and there in space. Distinction is genuine and for some purpose necessary. But it is not a distinction of kinds or degrees of reality. Space here is joined to space there, and events then are joined to events now; the reality is as much in the joining as in the distinction. In order to control the course of events it is indispensable to know their conditions. But to characterize the conditions, it is necessary to have followed them to some term which is not fully followed till we arrive at something enjoyed or suffered, had and used, in conscious experience. Vital and conscious events exhibit actualization of properties that are not fully displayed in the simpler relationships that are by definition termed physical.

Temporal quality is however not to be confused with temporal order. Quality is quality, direct, immediate and undefinable. Order is a matter of relation, of definition, dating, placing and describing. It is discovered in reflection, not directly had and denoted as is temporal quality. Temporal order is a matter of science; temporal quality

is an immediate trait of every occurrence whether in or out of consciousness. Every event as such is passing into other things, in such a way that a later occurrence is an integral part of the *character* or *nature* of present existence. An "affair", *Res*, is always at issue whether it concerns chemical change, the emergence of life, language, mind or the episodes that compose human history. Each comes from something else and each when it comes has its own initial, unpredictable, immediate qualities, and its own similar terminal qualities. The later is never just resolved into the earlier. What we call such resolution is merely a statement of the order by means of which we regulate the passage of an earlier into the later. We may explain the traits of maturity by better knowledge of childhood, but maturity is never just infancy plus.

It is not easy to distinguish between ends as *de facto* endings, and ends as fulfillments, and at the same time to bear in mind the connection of the latter with the former. We respond so directly to some objects in experience with intent to preserve and perpetuate them that it is difficult to keep the conception of a thing as terminus free from the element of deliberate choice and endeavor; when we think of it or discourse about it, we introduce connection. Since we turn away from trouble and suffering, since these things are not the objects of choice and effort save in avoidance, it seems forced to call them ends. To name them such appears an impropriety of language. I am quite willing to concede the linguistic point, provided its implications are acknowledged and adhered to. For in this case we are left, apart from a deliberately directed course of events, only with objects immediately used, enjoyed and suffered but having in themselves no claim

to the title of ends. Health in this case is not in itself an end of any natural process; much less an end-in-itself. It is an enjoyed good when it happens just as disease is a suffered ill. Similarly, truth of belief and statement is an affair that has the quality of good; but it is not an end just because it is good; it becomes an end only when, because of its goodness, it is actively sought for and reached as a conclusion. On this basis, all ends are ends-in-view; they are no longer ideal as characters of Being, as they were when they were in Greek theory, but are the objects of conscious intent. When achieved in existence they are ends because they are then conclusions attained through antecedent endeavor, just as a post is not a goal in itself, but becomes a goal in relation to a runner and his race. Either we must consistently stick to the equivalence of ends with objectives of conscious endeavor, or admit that all things directly possessed of irreducible and self-sufficing quality, red and blue, pain, solidity, toughness, smoothness and so on through the list, are natural ends.

There is however nothing self-evident, or even clear in the exclusive identification of ends with ends-in-view and of the latter with psychic states. The identification isolates conscious life from objective nature. It was a particular historic situation that effected the division. Modern science made it clear that nature has no preference for good things over bad things; its mills turn out any kind of grist indifferently. If Greek thought had contented itself with asserting that all immediacy of existence has a certain ultimacy and finality, a certain incommensurability and incommutability, if it had cited conscious experience as a striking instance of the indifference of natural processes to termini of good and evil

modern science would have had no destructive impact upon the doctrine of natural ends. It would rather have added resourcefulness to this doctrine. In explicit discovery of just the conditions antecedent to this good and that bad, it puts in our hands means of regulating the occurrence of things possessed of these qualities. But discovery of the indifference of natural energies to the production of good and bad endings, and the discovery of the over lapping and intermixture of processes leading to different outcomes, so completely overthrew the classic doctrine of ends, that it seemed to abolish any and every conception of natural ends. The logical result was to cut off "consciousness," as the collectivity of immediate qualities, from nature, and to create the dualism of physical nature and mind which is the source of modern epistemological problems.

A reconsideration of the theory of natural termini, is in historic sequel necessary to a correct envisagement of the connection of conscious life with nature. "Consciousness" in one of its many significations, is identical with direct apparition, obvious and vivid presence of qualities and of meanings. Take these apparitions as something else than emphatic characters of natural events and physical events, and objects become themselves remote and uncertain in existence arrived at only through the mediation of consciousness. Moreover, while quality is immediate and absolute, any particular quality is notoriously unstable and transitory. Immediate objects are the last word of evanescence. Consciousness, in the sense just indicated, is flux in which nothing abides. Persistence, "substance" is found only in some unapproachable things, which have to be invoked to supply

this flux with a substratum and locus. Thus we are confronted with the perplexing riddles familiar in epistemological theory. It suffices at this time to note but one. The realm of immediate qualities contains everything of worth and significance. But it is uncertain, unstable and precarious. The first consideration induces us to prize consciousness supremely; the second leads us to deny reality to it as compared with alleged underlying things with their fixity and permanence. Since immediate qualities come and go without inherent rhyme and reason since life is more unstable than inanimate things and conscious life is even more evanescent than life physiologically considered, since the coming and going of immediate qualities is susceptible of regulation only through the medium of things out of consciousness, "consciousness" becomes an anomaly. "Matter" as a complex of indirect not immediately given, and in some sense unknowable things becomes alone real and solid.

If we discount practical bias toward the regular and repeated, and hence toward "causes" as opposed to consequences, all that is indicated by the transiency of immediate qualitative affairs is that immediacy is immediacy. By the nature of the case the occurrence of the immediate is at the mercy of the sequential order. In the case of the things which appeal to common-sense as substances, properties like mass and inertia, unchanged solidity and extension, count most. Rate of change is slow and presents itself as a matter of attrition and accumulation; spatial qualities which are static chiefly figure. Time is of comparative indifference to the change of solid substances; a million years is a day. But whatever depends for its existence upon the interaction of a large

umber of independent variables is in unstable equilib-ium; its rate of change is rapid; successive qualities ave no obvious connection with one another; any shift f any part may alter the whole pattern. Thus, while ght and water are "substances," a rainbow, depending pon a highly specialized conjunction of light and vapor, nd being transient, is only a "phenomenon." Such im-nediate qualities as red and blue, sweet and sour, tone, he pleasant and unpleasant, depend upon an extraordin-ry variety and complexity of conditioning events; hence hey are evanescent. They are never exactly redupli-ated, because the exact combination of events of which hey are termini does not precisely recur. Hence they re even more "phenomenal" than a rainbow; they must e hitched to substance as its "modes" to get standing in reality."

Thus the things that are most precious, that are final, eing just the things that are unstable and most easily hanging, seem to be different in kind from good, solid, old-ashioned substance. Matter has turned out to be nothing ke as lumpy and chunky as unimaginative prejudice onceived it to be. But as compared with the changes f immediate qualities it seems in any case solid and sub-tantial; a fact which accounts, I suppose, for the inser-ion of an immaterial sort of substance, after the analogy f matter-substance, underneath mental affairs. But hen it is recognized that the latter are eventual and onsummatory to highly complicated interactions of atural events, their transiency becomes itself intelligible; is no ground of argument for a radical difference from ne physical, the latter being also resolvable into a char-cter of the course of events. While "consciousness" as

the conspicuous and vivid presence of immediate qualitie
and of meanings, is alone of direct worth, things not imme
diately present, whose intrinsic qualities are not directl
had, are primary from the standpoint of control. Fo
just because the things that are directly had are bot
precious and evanescent, the only thing that can be though
of is the conditions under which they are had. Th
common, pervasive and repeated *is* of superior rank fro
the standpoint of safeguarding and buttressing the hav
ing of terminal qualities. Directly we can do nothin
with the latter save have, enjoy and suffer them. S
reflection is concerned with the order which condition
prevents and secures their occurrence. The irony o
many historic systems of philosophy is that they have s
inverted the actualities of the case. The general, recu
rent and extensive has been treated as the worthy an
superior kind of Being; the immediate, intensive, trans
tory, and qualitatively individualized taken to be of im
portance only when it is imputed to something ordinar
which is all the universal can denotatively mean. I
truth, the universal and stable are important becaus
they are the instrumentalities, the efficacious condition
of the occurrence of the unique, unstable and passing.

The system which Aristotle bequeathed to the moder
world through Latin Christianity expresses the cons
quences of taking the universal which is instrumental, as
it were final. Actually, consummatory objects instead
being a graded series of numerable and unalterable speci
or kinds of existence ranked under still fewer genera, a
infinitely numerous, variable and individualized affair
Poets who have sung of despair in the midst of prosperit
and of hope amid darkest gloom, have been the tr

metaphysicians of nature. The glory of the moment and its tragedy will surely pass. The contingent, uncertain and incomplete give depth and scope to consummatory objects while things not directly had, things approachable only through reflective imagination and rational constructions are the conditions of such regulation of their occurrence as is feasible.

The richer and fuller are the terminal qualities of an object the more precarious is the latter, because of its dependence upon a greater diversity of events. At the best, therefore, control is partial and experimental. All prediction is abstract and hypothetical. Given the stability of other events, and it follows that certain conditions, selected in thought, determine the predictability of the occurrence of say, red. But since the other conditions do not remain unalterably put, what actually occurs is never just what happens in thought; the thing of here redness does not happen, but some thing with just this shade and tinge of red, in just this unduplicable content. Thus something unpredictable, spontaneous, unformulable and ineffable is found in any terminal object. Standardizations, formulae, generalizations, principles, universals, have their place, but the place is that of being instrumental to better approximation to what is unique and unrepeatable.

We owe to Romanticism the celebration of this fact; so fact apparently being fully discovered and communicated save as it is too much celebrated. Aversion to Romanticism as a system is quite justifiable; but even an obnoxious system may hit upon a truth unknown to soberer schemes. Call the facts romantic or by some sweeter sounding name, and it still remains true that

immediate and terminal qualities (whether or not called conciousness) form an unpredictable and unformulable flow of immediate, shifting, impulsive, adventured finalities, with respect to which the universal and regular objects and principles celebrated in classic thought are instrumental.

Perhaps we may prudently close this chapter with a reminder. To point out something as a fact is not the same thing as to commend or eulogize the fact. I am not saying that it is a fine and noble thing that whatever is immediately consummatory and precious should be also evanescent and unique, never completely subject to principle and rule. A reporter is not necessarily to blame for the state of thing that he reports. The fact hereby reported is so unescapable and so obvious to a candid empiricist that there is no occasion for either eulogy or condemnation. The only question is what is going to be done about the various instances of it which compose our lives, and give them humor and tragedy. The question is urgent for reflection; it is urgent for the most practical of acts in "getting a living," where the need to do something is constantly imperative. Materials used in reflection change even more rapidly than materials employed in meeting hunger and thirst. Their metabolism is at a quicker pace. Genuinely to think of a thing is to think of implications that are no sooner thought of than we are hurried on to *their* implications. There is no rest for the thinker, save in the *process* of thinking. Possibly it is for this reason that reflection upon the whole has been identified in human culture with onerous labor, with the sombre and melancholic. Reverie travels fast, but in reverie the labor of making connections taut and consistent is not involved. Only in circumstances as for

tunate as those of ancient Greece does effort to understand become a rich and full delight, so that it may be conceived of not only as an end of nature, but as its end of ends, for the sake of which all else happens.

Participation in this consummatory activity has, however, been confined to a few. Since it was conceived of as an end given spontaneously or "naturally" to a few, not as a practical and reflective conclusion to be achieved, it was concluded that some men are servile by nature, having as sole function to supply the materials which made it possible for other men to indulge in pure theoretical activity, without distraction by the need of making a living. Thus the conception that thought is the final and complete end of nature became a "rationalization" of an existing division of classes in society. The division of men into the thoughtless and the inquiring was taken to be the intrinsic work of nature; in effect it was identical with the division between workers and those enjoying leisure. Philosophers and scientific inquiries became the utmost acme of nature's perfection, being the least dependent upon outward acts and connections.

In a sense, this occurrence of thought and leisurely insight was natural; it happened in the course of natural processes. It was "given." Like any finality it had to be hit upon, achieved without premeditation before it might become an object of reflective choice and endeavor. But when it came to be reflected upon, its terms were misconceived. The conception that contemplative thought is *the* end in itself was at once a compensation for inability to make reason effective in practice, and a means for perpetuating a division of social classes. A local and temporal polity of historical nature became a metaphysics of everlasting being. Thought when it achieves truth

may, indeed, be said to fulfill the regularities and universalities of nature; to be their natural end. But its incarnation as an end in some, not others, does not partake of any universality. It is contingent, accidental; its achievement is a rational fulfillment only when it is the product of deliberate arts of politics and education.

Since nothing in nature is exclusively final, rationality is always means as well as end. The doctrine of the universality and necessity of rational ends can be validated only when those in whom the good is actualized employ it as a means to modify conditions so that others may also participate in it, and its universality exist in the course of affairs. The more it is asserted that thought and understanding are "ends in themselves," the more imperative is it that thought should discover why they are realized only in a small and exclusive class. The ulterior problem of thought is to make thought prevail in experience, not just the results of thought by imposing them upon others, but the active process of thinking. The ultimate contradiction in the classic and genteel tradition is that while it made thought universal and necessary and the culminating good of nature, it was content to leave its distribution among men a thing of accident, dependent upon birth, economic, and civil status. Consistent as well as humane thought will be aware of the hateful irony of a philosophy which is indifferent to the conditions that determine the occurrence of reason while it asserts the ultimacy and universality of reason. In as far as qualities of objects are found worthy of finality, the finding must eventuate in arts. Only thereby will thinking and knowing take their full place as events falling within natural processes, not only in their origin but also in their outcome.

CHAPTER FOUR

Nature, Means and Knowledge

No mythology is more familiar than that which tells how labor is due to trespass of man upon divine prerogatives, an act that brought curse upon the earth and woe to man. Because of this primeval rebellion against God, men toil amid thorns to gain an uncertain livelihood, and women bring forth children in pain. The tale is touching evidence that man finds it natural that nature should support his activities, and unnatural that the burden of continued and hard endeavor should be placed upon him. Festivity is spontaneous; labor needs to be accounted for. There is a long distance between the birth of the old legend and the formulation of classic political economy; but the doctrine of the latter that labor which is the source of value signifies cost, onerous sacrifice of present consummation to attainment of later good, expresses the same human attitude.

Yet, in fact, it was not enjoyment of the apple but the enforced penalty of labor that made man as the gods, *knowing* good and evil instead of just having and enjoying them. The exacting conditions imposed by nature, that have to be observed in order that work be carried through to success, are the source of all noting and recording of nature's doings. They supply the discipline that chastens exuberant fancy into respect for the operation of events, and that effect subjection of thought to a pertinent order of space and time. While leisure is the mother of drama, sport and literary spell-binding, neces-

sity is the mother of invention, discovery and consecutive reflection. While at happy junctures the course of extraordinary events may be bound or wheedled by enjoyed rite and ceremony, only work places a conclusive spell upon homely, everyday affairs. Spears, snares, gins, traps, utensils, baskets and webs may have their potency enhanced by adherence to ceremonial design, but the design is never a complete substitute for conformity to the efficacious resistances and adaptations of natural materials. Acumen, shrewdness, inventiveness, accumulation and transmission of information are products of the necessity under which man labors to turn away from absorption in direct having and enjoying, so as to consider things in their active connections as means and as signs. The same need converts immediate emotion irrelevant to everything save its own thrill into ordered interest in the movements and possibilities of natural events. Everything is done to bedeck utilities, instrumentalities, with reminders of consummatory events so as to lessen their burden, but useful arts in return supply ceremonial arts with their materials, appliances and patterns.

Tools, means, agencies are the characteristic thing in industry; such a statement is tautology. By its nature technology is concerned with things and acts in their instrumentalities, not in their immediacies. Objects and events figure in work not as fulfillments, realizations, but in behalf of other things of which they are means and predictive signs. A tool is a particular thing, but it is more than a particular thing, since it is a thing in which a connection, a sequential bond of nature is embodied. It possesses an objective relation as its own defining prop-

erty. Its perception as well as its actual use takes the mind to other things. The spear suggests the feast not directly but through the medium of other external things, such as the game and the hunt, to which the sight of the weapon transports imagination. Man's bias towards himself easily leads him to think of a tool solely in relation to himself, to his hand and eyes, but its primary relationship is toward other external things, as the hammer to the nail, and the plow to the soil. Only through this objective bond does it sustain relation to man himself and his activities. A tool denotes a perception and acknowledgment of sequential bonds in nature.

Classic philosophy, was conceived in wonder, born in leisure and bred in consummatory contemplation. Hence it noted the distinction between objects consummatory or final in the fine arts and instrumental and operative in the industrial. It then employed the distinction to interpret nature in terms of a dialectical physics. Useful arts are *possible* because things have observable efficiencies; but they are *necessary* because of lack, privation, imperfection, Non-being. This deficiency is manifest in sensation and appetite; the very transitiveness of materials which renders them capable of transformation into serviceable forms is evidence that they too lack fullness of Being. Things have potentialities or are instrumental because they are not Being, but rather Being in process of becoming. They lend themselves to operative connections that fulfill them because they are not themselves Real in an adequate sense. This point of view protected Greek thought from that modern onesidedness which conceives tools as mere subjective conveniences. But the safeguard was at the expense of the introduction into nature

of a split in Being itself, its division into some things which are inherently defective, changing, relational, and other things which are inherently perfect, permanent, self-possessed. Other dualisms such as that between sensuous appetite and rational thought, between the particular and universal, between the mechanical and the telic, between experience and science, between matter and mind, are but the reflections of this primary metaphysical dualism.

The counterpart of the conversion of esthetic objects into objects of science, into the one, true and good, was the conversion of operative and transitive objects into things which betray absence of full Being. This absence causes their changing instability which is, none the less, after the model of materials of the useful arts, potentially useful for ends beyond themselves. The social division into a laboring class and a leisure class, between industry and esthetic contemplation, became a metaphysical division into things which are mere means and things which are ends. Means are menial, subservient, slavish; and ends liberal and final; things as means testify to inherent defect, to dependence, while ends testify to independent and intrinsically self-sufficing being. Hence the former can never be *known* in themselves but only in their subordination to objects that are final; while the latter can be known in and through themselves by self-enclosed reason. Thus the identification of knowledge with esthetic contemplation and the exclusion from science of trial, work, manipulation and administration of things, comes full circle.

The ingratitude displayed by thinkers to artists who by creation of harmoniously composed objects supplied

idealistic philosophy with empirical models of their ultimately real objects, was shown in even greater measure to artisans. The accumulated results of the observations and procedures of farmers, navigators, builders furnished matter-of-fact information about natural events, and also supplied the pattern of logical and metaphysical subordination of change to directly possessed and enjoyed fulfillments. While thinkers condemned the industrial class and despised labor, they borrowed from them the facts and the conceptions that gave form and substance to their own theories. For apart from processes of art there was no basis for introducing the idea of fulfillment, realization, into the notion of end nor for interpreting antecedent operations as potentialities.

Yet we should not in turn exhibit ingratitude. For if Greek thinkers did not achieve science, they achieved the idea of science. This accomplishment was beyond the reach of artist and artisan. For no matter how solid the content of their own observations and beliefs about natural events, that content was bound down to occasions of origin and use. The relations they recognized were of local areas in time and place. Subject-matter underwent a certain distortion when it was lifted out of this context, and placed in a realm of eternal forms. But the idea of knowledge was thereby liberated, and the scheme of logical relationships among existences held up as an ideal of inquiry. Thinking was uncovered as an enterprize having its own objects and procedures; and the discovery of thought as method of methods in all arts added a new dimension to all subsequent experience. It would be an academic matter to try to balance the credit items due to the discovery of thought and of logic as a

free enterprise, against the debit consequences resultin
from the hard and fast separation of the instrumental an
final.

A great change took place in Greek experience betwee
the time of Homer and Hesiod and the fifth century befor
Christ. The earlier period evinces a gloomy temper o
life. The sense of the sovereignty of fortune, largely ill
fortune, is prevalent. The temper is shown by such
quotations as the following: "Thus the gods have de
cided for unhappy mortals that men should live in misery
while they themselves live free from suffering." "A
thousand woes traverse the abode of man; the earth i
gorged with them and the sea filled; day and night brin
grief. They come in silence for prudent Zeus has take
away their voice." "Men favored by Hecate have n
need for knowledge, memory or effort to achieve success
she acts alone without the assistance of her favorites."
Divination of the intent of unseen powers and piou
sacrifice are man's only resource, but this is of no avail
Reckon no man happy till after his death. The god
have indeed bestowed arts on man to ameliorate hi
hard lot, but their issue is uncertain. The ends rest
with the gods and with fate who rules even the gods,
fate to be neither bribed with offerings nor yet compelle
by knowledge and art.

By the days of the Sophists and their great Athenia
successors there is marked change in mood. The con
ditions then existed that have occasioned the myth of Gree
serenity. The Sophists taught that man could largel
control the fortunes of life by mastery of the arts. N
one has exceeded Plato in awareness of present ills. Bu
since they are due to ignorance and opinion, they ar

remediable, he holds, by adequate knowledge. Philosophy should terminate in an art of social control. The great rival of Plato taught that fortune "is a fantom which men have invented to excuse their own imprudence. Fortune does not easily resist thought and for the most part an instructed and far-seeing soul will attain its goal." In short arts based on knowledge coöperate with nature and render it amenable to human happiness. The gods recede into twilight. Divination has a powerful competitor. Worship becomes moral. Medicine, war, and the crafts desert the temple and the altar of the patron-god of the guild, as inventions, tools, techniques of action and works multiply.

This period of confident expansion did not endure. It soon gave way; it was succeeded by what Gilbert Murray has so well named the failure of nerve, and a return to the supernatural, philosophy changing from a supreme art into a way of access to the supernatural. Yet the episode even if brief is more than historically significant. It manifests another way open to man in the midst of an uncertain, incomplete and precarious universe; another way, that is, in addition to that of celebrating such moments of respite and festal joy as occur in the troubled life of man. Through instrumental arts, arts of control based on study of nature, objects which are fulfilling and good, may be multiplied and rendered secure. This road after almost two millenia of obscuration and desertion was refound and retaken; its rediscovery marks what we call the modern era. Consideration of the significance of science as a resource in a world of mixed uncertainty, peril, and of uniformity, stability, furnishes us with the theme of this chapter of experience.

That the sciences were born of the arts, the physica sciences of the crafts and technologies of healing, naviga tion, war and the working of wood, metals, leather, fla and wool; the mental sciences of the arts of politica management, is I suppose, an admitted fact. The di tinctively intellectual attitude which marks scientif inquiry was generated in efforts at controlling perso and things so that consequences, issues, outcomes woul be more stable and assured. The first step away fro oppression by immediate things and events was take when man employed tools and appliances, for manipula ing things so as to render them contributory to desire objects. In responding to things not in their immedia qualities but for the sake of ulterior results, immedia qualities are dimmed, while those features which a signs, indices of something else, are distinguished. thing is more significantly what it makes possible tha what it immediately is. The very conception of cogn tive meaning, intellectual significance, is that things i their immediacy are subordinated to what they porten and give evidence of. An intellectual sign denotes tha a thing is not taken immediately but is referred to som thing that may come in consequence of it. Intellectu meanings may themselves be appropriated, enjoyed an appreciated; but the character of intellectual meaning instrumental. Fortunate for us is it that tools and the using can be directly enjoyed; otherwise all work woul be drudgery. But this additive fact does not alter th definition of a tool; it remains a thing used as an agenc for some concluding event.

The first groping steps in defining spatial and ten poral qualities, in transforming purely immediate qua

es of local things into generic relationships, were taken
rough the arts. The finger, the foot, the unit of walk-
g were used to measure space; measurements of weight
iginated in the arts of commercial exchange and manu-
cture. Geometry, beginning as agricultural art, further
mancipated space from being a localized quality of im-
ediate extensity. But the radically different ways of
nceiving geometry found in ancient and in modern
ience is evidence of the slowness of the process of
mancipation of even geometrical forms from direct or
sthetic traits. In Greek astronomy the intrinsic quali-
es of figures always dominated their instrumental sig-
ficance in inquiry; they were forms to which phenomena
ad to conform instead of means of indirect measure-
ents. Hardly till our own day did spatial relations
et emancipated from esthetic and moral qualities, and
ecome wholly intellectual and relational, abstracted
om immediate qualifications, and thereby generalized
their limit.

Anything approaching a history of the growth of recog-
tion of things in their intellectual or instrumental phase
far beyond our present scope. We can only point
ut some of its net results. In principle the step is taken
henever objects are so reduced from their status of
mplete objects as to be treated as signs or indications
other objects. Enter upon this road and the time is
re to come when the appropriate object-of-knowledge
stripped of all that is immediate and qualitative, of
l that is final, self-sufficient. Then it becomes an
natomized epitome of just and only those traits which
e of indicative or instrumental import. Abstraction
not a psychological incident; it is a following to its

logical conclusion of interest in those phases of natura existence which are dependable and fruitful signs of othe things; which are means of prediction by formulation i terms implying other terms. Self-evidence ceases to b a characteristic trait of the fundamental objects of eithe sensory or noetic objects. Primary propositions ar statements of objects in terms which procure the simples and completest forming and checking of other proposi tions. Many systems of axioms and postulates are pos sible, the more the merrier, since new propositions a consequences are thus brought to light. Genuine scienc is impossible as long as the object esteemed for its own in trinsic qualities is taken as the object of knowledge. It completeness, its immanent meaning, defeats its use a indicating and implying.

Said William James, "Many were the ideal prototype of rational order: teleological and esthetic ties betwee things . . . . as well as logical and mathematica relations. The most promising of these things at firs were of course the richer ones, the more sentimenta ones. The baldest and least promising were mathe matical ones; but the history of the latter's applicatio is a history of steadily advancing successes, while tha of the sentimentally richer ones is one of relative sterilit and failure. Take those aspects of phenomena whic interest you as a human being most . . . . an barren are all your results. Call the things of nature a much as you like by sentimental moral and estheti names, no natural consequences follow from the naming . . . . But when you give the things mathemati cal and mechanical names and call them so many solid in just such positions, describing just such paths wit

just such velocities, all is changed. . . . . Your "things" realize the consequences of the names by which you classed them."[1]

A fair interpretation of these pregnant sentences is that as long as objects are viewed telically, as long as the objects of the truest knowledge, the most real forms of being, are thought of as ends, science does not advance. Objects are possessed and appreciated, but they are not *known*. To know, means that men have become willing to turn away from precious possessions; willing to let drop what they own, however precious, in behalf of a grasp of objects which they do not as yet own. Multiplied and secure ends depend upon letting go existent ends, reducing them to indicative and implying means. The great historic obstacle to science was unwillingness to make the surrender, lest moral, esthetic and religious objects suffer. To large groups of persons, the bald and dry objects of natural science are still objects of fear. The mechanical or mathematical-logical object presents itself as a rival of the ideal and final object. Then philosophy becomes a device for conserving "the spiritual values of the universe" by devices of interpretation which converts the material and mechanical into mind. By means of a dialectic of the implications of the possibility of knowledge, the physical is transformed into something mental, psychic—as if psychic existence were sure to be inherently more ideal than the physical.

The net result of the new scientific method was conception of nature as a mathematical-mechanical object. If modern philosophy, reflecting the tendencies of the

[1] James, Principles of Psychology, Vol. II, pp. 605–06.

new science, abolished final causes from nature, it was because concern with qualitative ends, already existing objects of possession and enjoyment, blocked inquiry discovery and control, and ended in barren dialectical disputes about definitions and classifications. A candid mind can hardly deny that sensory qualities, colors moist and dry, hard and soft, light and heavy are genuine natural ends. In them the potentialities of the body are brought into functioning, while the activity of the body thus achieved brings in turn to completion potentialities in nature outside of the body. Nevertheless the theory that final objects are the appropriate objects of knowledge in assimilating knowledge to esthetic contemplation had fatal consequences for science. All natural phenomena had to be known in terms of qualities. Hot and cold wet and dry, up and down, light and heavy were things to know with and by. They were essential forms, active principles of nature. But Galileo and his scientific and philosophical followers (like Descartes and Hobbes) reversed the method by asserting that these sensory forms are things to be known, challenges to inquiry, problems, not solutions nor terms of solution. The assertion was a general one; it necessitated *search* for objects of knowledge. Dependable material with which to know was found in a different realm of being; in spatial relations, positions, masses, mathematically defined and in motion as change of space having direction and velocity. Qualities were no longer things to do with they were things already done, effects, requiring to be known by statement and description in mathematical and mechanical relations. The only world which defines and describes and explains was a world of masses in motion, arranged in a system of Cartesian coördinates

When we view experientially this change, what occurs is the kind of thing that happens in the useful rts when natural objects, like crude ores, are treated as aterials for getting something else. Their character eases to lie in their immediate qualities, in just what they re and as directly enjoyed. Their character is now epresentative; some pure metal, iron, copper, etc. is heir essence, which may be extracted as their "true" ature, their "reality." To get at this reality many xistent constituents have to be got rid of. From the tandpoint of the *object*, pure metal, these things to be liminated are "false," irrelevant and obstructive. They tand in the way, and in the existent thing those qualities re alone significant which indicate the ulterior objective nd which offer means for attaining it.

Modern science represents a generalized recognition nd adoption of the point of view of the useful arts, for it roceeds by employment of a similar operative technique f manipulation and reduction. Physical science would e impossible without the appliances and procedures of eparation and combinations of the industrial arts. In seful arts, the consequence is increase of power, multipli- ation of ends appropriated and enjoyed, and an en- rged and varied flexibility and economy in means used o achieve ends. Metal can be put to thousands of ses, while the crude ore can only be beheld for whatever sthetic qualities it happens to present, or be hurled odily at game or an enemy. Reduction of natural xistences to the status of means thus presents nothing in- erently adverse to possessed and appreciated ends, but ather renders the latter a more secure and extensive ffair.

Why then has it been so often assumed in modern philosophy that the advance of physical science has created a serious metaphysical problem; namely, that of the relation of a mechanical world as the object of knowledge to ends; the reconciliation of antithetical worlds of description and appreciation? In empirical fact, the advance of mechanistic science has multiplied and diversified ends; has increased wants and satisfactions, and has multiplied and diversified the means of attaining them. Why the problem? There are two historical empirical reasons to be given in answer. In the first place, the Aristotelian metaphysics of potentiality and actuality, of objects consummatory of natural processes, was intricately entangled with an astronomy and physics which had become incredible. It was also entangled with doctrines and institutions in politics and economics which were fast getting out of relationship to current social needs. The simplest recourse was to treat the classic tradition as the Jonah of science and throw it bodily overboard. The method was imperious and impatient, but it served a need. By a single act it relieved scientific inquiries of notions that were hampering, even paralyzing investigation into nature and that were limiting new practices by outworn sanctions.

By itself alone, however, this cause would hardly have created more than a passing historic episode. The reason that rendered the abandonment of any theory of nature ends something more than a gesture of impatient haste lies in the persistence of the classic theory of knowledge. Greek thought regarded possession, contemplation, as the essence of science, and thought of the latter as such complete possession of reality as incorporates it with

mind. The notion of knowledge as immediate possession of Being was retained when knowing as an actual affair radically altered. Even when science had come to include a method of experimental search and finding, it was still defined as insight into, grasp of, real being as such, in comparison with which other modes of experience are imperfect, confused and perverted. Hence a serious problem. If the proper object of science is a mathematico-mechanical world (as the achievements of science have proved to be the case) and if the object of science defines the true and perfect reality (as the perpetuation of the classic tradition asserted), then how can the objects of love, appreciation—whether sensory or ideal—and devotion be included within true reality?

Efforts to answer this question constitute a large part of the technical content of modern metaphysical thought. Given the premises, its import covers almost every thing from the problem of freedom, ideals and ideas to the relation of the physical and the mental. With respect to the latter, there is the causal problem of their existential relation; and there is the cognitive problem of how one order of existence can refer to the other in such a way as to know it. We are not concerned here with the voluminous literature and various (controversial and controverted) points of view that have emerged. It is pertinent, however, to recall the source of the problems; and to register the statement that without the underlying dubious assumption, we are not called upon to find solutions; they cease to be perplexities as soon as certain premises are surrendered. The premise which concerns us here is that science is grasp of reality in its final self-sufficing form. If the proper object of knowledge has the

character appropriate to the subject matter of the useful arts, the problem in question evaporates. The objects of science, like the direct objects of the arts, are an order of relations which serve as tools to effect immediate havings and beings. Goods, objects with qualities of fulfillment are the natural fruition of the discovery and employment of means, when the connection of ends with a sequential order is determined. Immediate empirical things are just what they always were: endings of natural histories. Physical science does not set up another and rival realm of antithetical existence; it reveals the state or order upon which the occurrence of immediate and final qualities depends. It adds to casual having of ends an ability to regulate the date, place and manner of their emergence. Fundamentally, the assertion that this condition of ordered relationships is mathematic, mechanical, is tautology; that is, the meaning of anything which is such that perception and use of it enables us to regulate consequences or attain terminal qualities is a mathematical, mechanical—or if you please—logical order. If we did not discover those which we have found, we should have to find another, if deliberate planning and execution are to occur.

If science be perfect grasp, or envisagement of being, and if science terminate with a mathematico-mechanical world, then, in the second place, we have upon our hands the problems of reality and appearance. In ancient thought, the problem occurred in a simple form. There were higher and lower forms of knowledge; but all stages of knowledge were alike realizations of some level of Being, so that appearance in contrast with reality meant only a lower degree of Being, being imperfect or not fully

actualized. In modern science, with its homogenous natural world, this contrast of perfect and defective Being is meaningless. It is a question of knowledge or error, not of differences of cognitive grasp in one to one correspondence with different levels of Being. In the ancient view, sensation and opinion are good forms of knowledge in their place; *what* they know, their place, is just an inferior grade of Being. To the modern mind, they are not knowledge of anything unless they are brought to agree with the deliverances of science. Is matter an appearance of mind as true reality? Or is the mental only an appearance of the physical as the final reality? Or are both of them appearances of some still more ultimate reality?

Such questions are as necessary as they are unanswerable, given the premise which defines knowledge as direct grasp and envisagement. They vanish if the proper objects of science are nature in its instrumental characters. Any immediate object then *becomes* for inquiry, as something *to be* known, an appearance. To call it "appearance" denotes a functional status, not a kind of existence. Any quality in its immediacy is doubly an appearance. In the first place it appears; it is evident, conspicuous, outstanding, it is, to recur to language already used, *had*. A thing appears in the sense in which a bright object appears in a dark room, while other things remain obscure, hidden. The affair is one of physical and physiological limits of vision and audition, etc. We see islands floating as it were upon the sea; we call them islands because of their apparent lack of continuity with the medium that immediately surrounds them. But they are projections of the very earth upon which we walk; the connecting

links do not ordinarily appear; they are there, but are not had. The difference between the appearing and the unappearing is of immense practical and theoretical import, imposing upon us need for inference, which would not exist if things appeared to us in their full connections, instead of with sharply demarcated outlines due to limits of perceptibility. But the ground of the difference is as physical as that between solid, liquid and gas. The endings of organic events, seeing, hearing, etc. are for the time being, or immediately, endings of the history of all natural events. To re-establish a connection of histories within a longer course of events and a more inclusive state of affairs, requires delving, probing, and extension by artifice beyond the apparent. To link the things which are immediately and apparitionally had with one another by means of what is not immediately apparent and thus to create new historic successions with new initiations and new endings depends in turn upon the system of mathematical-mechanical systems which form the proper objects of science as such.

The empirical basis of the distinction between the apparent and the non-apparent thus lies in the need for inference. When we take the outstandingly evident as evidence, its status is subordinate to that of unperceived things. For the nonce, it is a way of establishing something more fundamental than it is itself with respect to the object of inquiry. If we conceive of the world of immediately apparent things as an emergence of peaks of mountains which are submerged except as to their peaks or endings, and as a world of initial climbings whose subsequent career emerges above the surface only here and there and by fits and starts; and if we give attention

to the fact that any ability of control whatever depends upon ability to unite these disparate appearances into a serial history, and then give due attention to the fact that connection into a consecutive history can be effected only by means of a scheme of constant relationships (a condition met by the mathematical-logical-mechanical objects of physics), we shall have no difficulty in seeing why it is that the immediate things from which we start lend themselves to interpretation as signs or appearances of the objects of physics; while we also recognize that it is only with respect to the function of instituting connection that the objects of physics can be said to be more "real." In the total situation in which they function, they are means to weaving together otherwise disconnected beginnings and endings into a consecutive history. Underlying "reality" and surface "appearance" in this connection have a meaning fixed by the function of inquiry, not an intrinsic metaphysical meaning.

To treat therefore the object of science—which in effect is the object of physics—as a complete and self-sufficient object, the end of knowing, is to burden ourselves with an unnecessary and insoluble problem. It commits us on one side to a realm of immediately apparent things, the socalled perceptual order which is an order only by courtesy, and on the other to a realm of inferred and logically constructed real objects. These two realms are rivals of each other. If knowledge is possession or grasp, then there are two incompatible kinds of knowledge, one sensible, the other rational. Which is the genuine article and which the counterfeit? If we say sensible knowledge is the genuine, then we are committed to phenomenalism of a somewhat chaotic kind, unless we follow Berkeley and invoke deity to hold the immediate things together.

If we say rational knowledge is the genuine article, then true reality becomes the reality of materialism or of logical realism or of objective idealism, according to training and temperament. To follow the clues of experience is to see that the socalled sensible world is a world of immediate beginnings and endings; not at all an affair of cases of knowledge but a succession of qualitative events; while the socalled conceptual order is recognized to be the proper object of science, since it constitutes the scheme of constant relationships by means of which spare, scattered and casual events are bound together into a connected history. These emergent immediate events remain the beginning and the end of knowledge; but since their *occurrence* is one with their being sensibly, affectionally and appreciatively *had*, they are not themselves things known. That the qualities and characters of these immediate apparitions are tremendously modified when they are linked together by 'physical objects'—that is, by means of the mathematical-mechanical objects of physics—is a fact of the same nature as that a steel watch-spring is a modification of crude iron ore. The objects of physics subsist precisely in order to bring about this transformation—to change, that is, casual endings into fulfillments and conclusions of an ordered series, with the development of meaning therein involved.

Practically all epistemological discussion depends upon a sudden and unavowed shift to and fro from the universe of having to the universe of discourse. At the outset, ordinary empirical affairs, chairs, tables, stones, sticks, etc., are called physical objects—which is obviously a term of theoretical interpretation when it so applied, carrying within itself a complete metaphysical commit-

ment. Then physical objects are defined as the objects of physics, which is, I suppose, the only correct mode of designation. But such objects are clearly very different things from the plants, lamps, chairs, thunder and lightning, rocks etc. that were first called physical objects. So another transformation phantasmagoria in the tableau is staged. The original "physical things," ordinary empirical objects, not being the objects of physics, are not physical at all but mental. Then comes the grand dissolving climax in which objects of physics are shown as themselves hanging from empirical objects now dressed up as mental, and hence as themselves mental.

Everything now being mental, and the term having lost its original contrasting or differential meaning, a new and different series of transformation scenes is exhibited. Immediate empirical things are resolved into hard sensory data, which are called the genuine physical things, while the objects of physical science are treated as are logical constructions; all that remains to constitute mental existence is images and feelings. It is not necessary to mention other permutations and combinations, familiar to the student of theories of the possibility of knowledge. The samples mentioned are illustrations of the sort of thing which happens when the having of immediate objects, whether sensible, affectional or appreciatoral, is treated as a mode of knowledge.

If objects which are colored, sonorous, tactile, gustatory, loved, hated, enjoyed, admired, which are attractive and repulsive, exciting, indifferent and depressive, in all their infinitely numerous modes, are beginnings and endings of complex natural affairs, and if physical objects (defined as objects of physical science) are consti-

tuted by a mathematical-mechanical order; then physical objects instead of involving us in the predicament of having to choose between opposing claimants to reality, have precisely the characters which they should have in order to serve effectively as means for securing and avoiding immediate objects. Four of these characters may be noted. First, immediate things come and go; events in the way of direct seeing, hearing, touching, liking, enjoying, and the rest of them are in rapid change; the subject-matter of each has a certain uniqueness, unrepeatedness. Spatial-temporal orders, capable of mathematical formulation are, by contrast, constant. They present stability, recurrence at its maximum, raised to the highest degree. Qualitative affairs like red and blue, although in themselves unlike, are subject to comparison in terms of objects of physics; on the basis of connection with orders of sequence, a qualitative spectrum or scale becomes a scheme of numerable variations of a common unit.

The second character of objects of science follows from this feature. The possibility of regulating the occurrence of any event depends upon the possibility of instituting substitutions. By means of the latter, a thing which is within grasp is used to stand for another thing which is not immediately had, or which is beyond control. The technique of equations and other functions characteristic of modern science is, taken generically, a method of thoroughgoing substitutions. It is a system of exchange and mutual conversion carried to its limit.[2] The

[2] The modern mathematical conception of infinity as correspondence of part and whole appears to represent this function in its generalized form.

cognitive result is the homogeneous natural world of modern science, in its contrast with the qualitatively heterogeneous world of ancient science; the latter being made up of things different in inherent kinds and in qualities of movement, such up and down, lateral and circular, and heterogeneous according to periods of time, such as earlier and later. These become amenable to transformations in virtue of reciprocal substitutions.

In the third place, objects of knowledge as means explain the importance attached to elements, or numerically discrete units. Control of beginnings and ends by means is possible only when the individual, the unique, is treated as a composite of parts, made by sequential differentiations and integrations.[3] In its own integrity an immediate thing just exists as it exists; it stays or it passes; it is enjoyed or suffered. That is all that can be said. But when it is treated as the outcome of a complex convergence or coincidence of a large number of elementary independent variables, points, moments, numerical units, particles of mass and energy or more elementary space-times, (which in spite of their independence are capable of one to one correspondence with one another) the situation changes. The simples or elements are in effect the last pivots upon which regulation of conditions, turns; last, that is to say, as far as present appliances permit.

[3] Leibniz, whose monadism is the first philosophical manifestation of this notion, and the prototype of analytic realism, or theory of external relations, asserted the existence of monads on the ground that every composite implies elements. Surely. But he omitted to note that metaphysically the case was begged as soon as an affair, no matter how elaborate in structure, is regarded as *being* composite. To *be* a composite is one thing; to be capable of reduction to a composite by certain measures, is another thing.

Preoccupation with elementary units is as marked in logic, biology, and psychology, as in physics and chemistry. Sometimes it seems to have resulted in taking merely dialectical entities for actual unitary elements but that is not logically necessary. Such an outcome signifies only that the right units were not found. Serious objection holds when the instrumental character of the elements is forgotten; and they are treated as independent ultimate; when they are treated as metaphysical finalities insoluble epistemological problems result. Whatever are designated as elements, whether logical, mathematical physical or mental, depend especially upon the existence of immediate, qualitatively integral objects. Search for elements starts with such empirical objects already possessed. Sensory data, whether they are designated psychic or physical, are thus not starting points; they are the products of analysis. Denial of the primary reality of immediate empirical objects logically terminates in an abrogation of the reality of elements; for sensory data, or sensa and *sensibilia*, are the residua of analysis of these primary things. Moreover every step of analysis depends upon continual reference to these empirical objects. Drop them from mental view for a moment and any clew in search for elements is lost. Unless macroscopic things are recognized, cells, electrons, logical elements become meaningless. The latter have meaning only as elements *of*. Since, for example, only propositions have implications, a proposition cannot be a mere conjunction of terms; terms having no implications, a proposition so formed would have no significance. Terms must have a significance and since that they have only in a proposition, they depend upon some prior unity. In

similar fashion, a purely unitary physical element would have no efficacy; it could not act or be acted upon.

We quote from a psychiatric writer speaking of his own field, in dealing with a particular matter on its own merits. With reference to one stage in the development of the theory of mental disorders, Dr. Adolph Meyer said that "there was a quest for elements of mind and their immediate correlation with the latest discoveries in the structure of the brain. The centre theory and the cell and neuronic theory seemed obligatory standpoints. Today we have become shy of such a one-sided not sufficiently functional materialism. . . . . There is always a place for elements, but there is certainly also a place for the large momentous facts of human life just as we find it. . . . . The psychopathologist had to learn to do more than the so-called "elementalist," who always goes back to the elements and smallest units and then is apt to shirk the responsibility of making an attempt to solve the concrete problems of greater complexity. The psychiatrist has to study individuals and groups as wholes, as complex units, as the "you" or "he" or "she" or "they" we have to work with. We recognize that throughout nature we have to face the general principle of unit-formation, and the fact that new units need not be a mere sum of the component parts, but can be an actually new entity not wholly predictable from the component parts and known only through actual experience with the specific product."[4]

Lastly, the instrumental nature of objects of knowledge accounts for the central position of laws, relations.

[4] Adolph Meyer, A Psychiatric Milestone, p. 32. P. 38.

These are the formulations of the regularities upon which intellectual and other regulation of things as immediate apparitions depends. Variability of elements in mathematical science is specious; elements vary independently of one another, but not independently of a *relation* to others, the relation or law being the constancy among variations. It is a truism that mathematics is the method by which elements can be stated as terms in constant relations, and be subjected to equations and other functions of transformation and substitution. An element is appropriately represented by a mathematical variable; for since any variable falls within some equation, it is treated as a constant function of other variables. The shift from variability to constancy is repeated as often as is needed. It is thus only *pro forma* that the variable is variable. It is not variable in the sense in which unique individualized existences are variable. The inevitable consequence is the subjection of individuals or unique modes of variation to external relations to laws of uniformity; that is to say, the elimination of individuality. Bear in mind the instrumental nature of the relation of elements, and this abrogation of individuality merely means a temporary neglect—an abstracted gaze—in behalf of attending to conditions under which individualities present themselves. Convert the objects of knowledge into real things by themselves, and individuals become anomalous or unreal; they are not individualized for science but are instances, cases, specimens, of some generical relation or law.

The difficulty under which morals labor in this case is evident. They can be "saved" only by the supposition of another kind of Being from that with which natur-

sciences are concerned. History and anthropology are implicated in a similar predicament. The former has for subject-matter not only individual persons but unduplicated situations and events. The attempt to escape the dilemma by recourse to uniform and unilinear laws of sequence or "evolution" is inept; it contradicts the premises assumed, and is not borne out by facts. Contemporary anthropologists have made clear the historical nature of the phenomena with which they deal. Cultures are in many respects individual or unique, and their manifestations are "explained" by correlations with one another and by borrowings due to chance contacts. The chief, even if not sole, law of their changes is that of transmission from other individualized cultures.

It is no wonder that *Historismus* has become the preoccupying problem of a whole school of thinkers, many of whom now hold that the only attitude which can be taken toward historic situations and characters is non-intellectual, being esthetic appreciation, or sympathetic artistic rehabilitation. The theory which identifies knowledge with the beholding or grasp of self-sufficient objects reaches an impasse where it comes to deal with historical science in contrast with physics. Windelband justly draws the conclusion that Being and knowledge compel "antinomianism," certain problems inevitably force themselves upon us, but all efforts at solution are hopeless.[5]

[5] "It remains an unsolved problem why timeless reality needs realization in the temporal course of the event or why it tolerates in itself an event in the temporal course of which there is something that differs from its own nature. We do not understand why that which is also has nevertheless to happen; and still less why something different happens from that which is in itself without time."

Introduction to Philosophy, English translation, p. 299.

Empirically, individualized objects, unique affairs, exist. But they are evanescent, unstable. They tremble on the verge of disappearance as soon as they appear. Useful arts prove that, within limits, neglect of their uniqueness and attention to what is common, recurrent, irrelevant to time, procures and perpetuates the happening of some of these unique things. Timeless laws, *taken by themselves*, like all universals, express dialectic intent, not any matter of fact existence. But their ultimate implication is application; they are methods, and when applied as methods they regulate the precarious flow of unique situations. Objects of natural science are not metaphysical rivals of historical events; they are means of directing the latter. Events change; one individual gives place to another. But individually qualified things have some qualities which are pervasive, common, stable. They are out of time in the sense that a particular temporal quality is irrelevant to them. If anybody feels relieved by calling them eternal, let them be called eternal. But let not "eternal" be then conceived as a kind of absolute perduring existence or Being. It denotes just what it denotes: irrelevance to existence in its temporal quality. These non-temporal, mathematical or logical qualities are capable of abstraction, and of conversion into relations, into temporal, numerical and spatial *order*.[6] As such they are dialectical, non-existential

[6] For a convincing discussion see Brown's essay, Intelligence and Mathematics, in the volume, Creative Intelligence, especially the section entitled Things, Relations, and Quantities. "Instead of reducing qualities to relations, it seems to me a much more intelligible view to conceive relations as abstract ways of taking qualities in general, as qualities thought of in their function of bridging a gap or making a transition between two bits of reality that have previously been taken as separate

But also as such they are tools, instrumentalities applicable historic events to help regulate their course.

This entire discussion has but a single point. It aims to show that the problems which constitute modern epistemology with its rival, materialistic, spiritualistic, dualistic doctrines, and rival realistic, idealistic, representational theories; and rival doctrines of relation of mind and matter occasionalism, pre-established harmony, parallellism, panpsychism, etc., have a single origin in the dogma which denies temporal quality to reality as such. Such a theory is bound to regard things which are causally explanatory as superior to results and outcomes; for the temporal dependence of the latter cannot be disguised, while "causes" can be plausibly converted into independent beings, or laws, or other non-temporal forms. As has been pointed out, this denial of change to true Being had its source in bias in favor of objects of contemplative enjoyment, together with a theory that such objects are the adequate subject-matter of science.

The bias is spontaneous and legitimate. The accompanying theory of knowledge and reality is a distortion. The legitimate implication of the preference for worthy objects of appreciation is the necessity of art, or control of the sequential order upon which they depend; a necessity which carries with it the further implication that this order, which is to be discovered by inquiry and confirmed by experimental action, is the proper object of knowledge.

things." P. 159. Thus "terms, (elements) and relations are both (p. 160) abstract replacements of qualitatively heterogeneous realities of such a sort as "to symbolize their *effective* nature in particular respect." The word "effective" brings out the agreement of the text with this point of view, for which I am much indebted to Dr. Brown.

Such a recognition would, however, have conceded the dependence of the contemplative functions of the leisure class upon the appliances and technique of artisans—among whom all artists were included. And since in olden time the practice of the arts was largely routine, fixed by custom and ready-made patterns, such a recognition would have carried with it the need of transforming the arts themselves, if the occurrence of ends was to be a real fulfillment, a realization, and not a contingent accident. The introduction of inventive thought into the arts and the civil emancipation of the industrial class at last made the transformation possible.

When the appliances of a technology that had grown more deliberate were adopted in inquiry, and the lens pendulum, magnetic needle, lever were used as tools of knowing, and their functions were treated as models to follow in interpreting physical phenomena, science ceased to be identified with appreciative contemplation of noble and ideal objects, was freed from subjection to esthetic perfections, and became an affair of time and history intelligently managed. Ends were in consequence no longer determined by physical accident and social traditions. Anything whatsoever for which means could be found was an end to be averted or to be secured. Liberation from a fixed scheme of ends made modern science possible. In large affairs, practice precedes the possibility of observation and formulation; the results of practice must accumulate before mind has anything to observe. There is little cause for wonder therefore that long after the objects of science had become instrumentalities rather than things in their own rights, the old theory persisted, and philosophy spent much of its effort in the

effort to reconcile the traditional theory of knowledge as immediate possession with the terms and conclusions of the new method of practice.

It is characteristic of the inevitable moral pre-possession of philosophy, together with the subjective turn of modern thought, that many critics take an "instrumental" theory of knowledge to signify that the value of knowing is instrumental to the knower. This is a matter which is as it may be in particular cases; but certainly in many cases the pursuit of science is sport, carried on, like other sports, for its own satisfaction. But "instrumentalism" is a theory not about personal disposition and satisfaction in knowing, but about the proper objects of science, what is "proper" being defined in terms of physics.

The distinction between tools (or things in their objectivities) and fulfilled products of the use of tools accounts for the distinction between known objects on one side and objects of appreciation and affection on the other. But the distinction primarily concerns objects themselves; only secondarily does it apply to attitudes, dispositions, motivations. Making and using tools may be intrinsically delightful. Prior to the introduction of machinery for quantitative production and sale of commodities for profit, utensils were themselves usually works of art, esthetically satisfying. This fact does not however define them *as* utensils; it does not confer upon them their characteristic property. In like manner, the pursuit of knowledge is often an immediately delightful event; its attained products possess esthetic qualities of proportion, order, and symmetry. But these qualities do not mark off or define the characteristic and appropriate *objects* of science. The character of the object is like that of a tool, say a

lever; it is an order of determination of sequential changes terminating in a foreseen consequence.

We are brought to the question of method. In ancient science the essence of science was demonstration; the life blood of modern science is discovery. In the former, reflective inquiry existed for the sake of attaining a stable subject-matter; in the latter systematized knowledge exists in practice for the sake of stimulating, guiding and checking further inquiries. In ancient science, "learning" belonged in the realm of inferior being, of becoming, change; it was transitive, and ceased in the actualization of final and fixed objects. It was thought of after the analogy of master and disciple; the former was already in possession of the truth, and the learner merely appropriated what already is there in the store house of the master. In modern science, learning is finding out what nobody has previously known. It is a transaction in which nature is teacher, and in which the teacher comes to knowledge and truth only through the learning of the inquiring student.

Characteristic differences in logic thus accompany the change from "knowledge" whose subject-matter is final affairs to knowledge dealing with instrumental objects. Where the objects of knowledge are taken to be final, perfect, complete, metaphysical fulfillments of nature, proper method consists in definition and classification; learning closes with demonstration of the rational necessity of definitions and classifications. Demonstration is an exhibition of the everlasting, universal, final and fixed nature of objects. Investigation denoted merely the accumulation of material with which to fill in gaps in an antecedent ready-made hierarchy of species. Discovery

was merely the perception that some particular material hitherto unclassified by the learner came under a universal form already known. The universal is already known because given to thought; and the particular is already known, because given to perception; learning merely brings these two given forms into connection, so that what is "discovered" is the subsumption of particular under its universal.

Apart from their theories, or in spite of them, the Greeks were possessed by a lively curiosity, and their practice was better than their logic. In the medieval Christian period, the logic was taken literally. Revelation, scriptures, church fathers and other authentic sources, increased the number of given universal truths, and also of given particular facts and events. The master-teacher was God, who taught not through the dim instrumentality of rational thought alone, but directly through official representatives. The form of apprehension of truth remained the demonstrative syllogism; the store of universal truths was supplemented by the gracious gift of revelation, and the resources of the minor premise extended by divinely established historic facts. Truth was given to reason and faith; and the part of the human mind was to humble itself to hearken, accept and obey.

The scheme was logically complete; it carried out under new circumstances the old idea that the highest end and good of man is knowledge of true Being, and that such knowledge in the degree of its possession effects an assimilation of the mind to the reality known. It added to old theoretical premises such institutions and practices as were practically required to give them effect, so that the humblest of human creatures might at least start on the

road to that knowledge the possession of which is salva-
tion and bliss. In comparison, most modern theories
are an inconsistent mixture; dialectically the modernist
is easy prey to the traditionalist; he carries so many of
the conceptions of the latter in his intellectual outfit that
he is readily confuted. It is his practice not his theory
that gets him ahead. His professed logic is still largely
that of antecedent truths, demonstration and certitude;
his practice is doubting, forming hypotheses, conduct-
ing experiments. When he surrenders antecedent truths
of reason it is usually only to accept antecedent truths of
sensation. Thus John Stuart Mill conceives of an inductive
logic in which certain canons shall bear exactly the same
relation to inquiry into fact that the rules of the syllogism
bore to classic "deductive" proof or dialectic. He recog-
nizes that science is a matter of inference, but he is as cer-
tain as was Aristotle that inference rests upon certain
truths which are immediately possessed, differing only
about the organ through which they come into our pos-
session.

But in the practice of science, knowledge is an affair of
making sure, not of grasping antecedently given sureties.
What is already known, what is accepted as truth, is of
immense importance; inquiry could not proceed a step
without it. But it is held subject to use, and is at the
mercy of the discoveries which it makes possible. It has
to be adjusted to the latter and not the latter to it. When
things are defined as instruments, their value and validity
reside in what proceeds from them; consequences not
antecedents supply meaning and verity. Truths al-
ready possessed may have practical or moral certainty
but logically they never lose a hypothetic quality. They

are true *if:* if certain other things eventually present themselves; and when these latter things occur they in turn suggest further possibilities; the operation of doubt-inquiry-finding recurs. Although science is concerned in practice with the contingent and its method is that of making hypotheses which are then tried out in actual experimental change of physical conditions, its traditional formulation persists in terms of necessary and fixed objects. Hence all kinds of incoherences occur. The more stubbornly the traditional formulation is clung to, the more serious become these inconsistencies.

Leonardo virtually announced the birth of the method of modern science when he said that true knowledge begins with opinion. The saying involves a revolution; no other statement could be so shocking to the traditional logic. Not that opinion as such is anything more than opinion or an unconfirmed and unwarranted surmise; but that such surmises may be used; when employed as hypotheses they induce experimentation. They then become fore-runners of truth, and mind is released from captivity to antecedent beliefs. Opinion, in the classic conception, was concerned with what was inherently contingent and variable as to possibility and probability, in contrast with knowledge concerned with the inherently necessary and everlasting. It therefore was as ultimate and unquestionable *in its proper sphere* as science was in its place. But opinion as a venture, as an "it seems to me probable," is an occasion of new observations, an instigator of research, an indispensable organ in deliberate discovery. Taken in this fashion, opinion was the source of new histories, the beginning of operations that terminated in new conclusions. Its worth lay

neither in itself nor in a peculiar realm of objects to which it was applied, but in the direction of inquiries which it set agoing. It was a starting point, and like any beginning of any history was altered and displaced in the history of which it was the initiation.

Sometimes discovery is treated as a proof of the opposite of which it actually shows. It is viewed as evidence that the object of knowledge is already there in full-fledged being and that we just run across it; we uncover it as treasure-hunters find a chest of buried gold. That there is existence antecedent to search and discovery is of course admitted; but it is denied that as such, as other than the conclusion of the historical event of inquiry in its connection with other histories, it is already the object of knowledge. The Norsemen are said to have discovered America. But in what sense? They landed on its shores after a stormy voyage; there was discovery in the sense of hitting upon a land hitherto untrod by Europeans. But unless the newly found and seen object was used to modify old beliefs, to change the sense of the old map of the earth, there was no discovery in any pregnant intellectual sense, any more than mere stumbling over a chair in the dark is discovery till used as basis of inference which connects the stumbling with a body of meanings. Discovery of America involved insertion of the newly touched land in a map of the globe. This insertion, moreover, was not merely additive, but transformative of a prior picture of the world as to its surfaces and their arrangements. It may be replied that it was not the world which was changed but only the map. To which there is the obvious retort that after all the map is part of the world, not something outside it, and

that its meaning and bearings are so important that a change in the map involves other and still more important objective changes.

It was not simply states of consciousness or ideas inside the heads of men that were altered when America was actually discovered; the modification was one in the public meaning of the world in which men publicly act. To cut off this meaning from the world is to leave us in a situation where it makes no difference what change takes place in the world; one wave more or less in a puddle is of no account. Changing the meaning of the world effected an existential change. The map of the world is something more than a piece of linen hung on a wall. A new world does not appear without profound transformations in the old one; a discovered America was a factor interacting with Europe and Asia to produce consequences previously impossible. A potential object of further exploration and discoveries now existed in Europe itself; a source of gold; an opportunity for adventure; an outlet for crowded and depressed populations, an abode for exiles and the discounted, an appeal to energy and invention: in short, an agency of new events and fruitions, at home as well as abroad. In some degree, every genuine discovery creates some such transformation of both the meanings and the existences of nature.

Modern idealistic theories of knowledge have displayed some sense of the method and objective of science. They have apprehended the fact that the object of knowledge implies that the found rather than the given is the proper subject matter of science. Recognizing the part played by intelligence in this finding, they have framed a theory of the constitutive operation of mind

in the determination of real objects. But idealism while it has had an intimation of the constructively in strumental office of intelligence, has mistranslated th discovery. Following the old tradition, in its exclusiv identification of the object of knowledge with reality equating truth and Being, it was forced to take th work of thought absolutely and wholesale, instead o relatively and in detail. That is, it took re-constitutio to be constitution; re-construction to be construction Accepting the premise of the equivalence of Reality wit the attained object of knowledge, idealism had no way o noting that thought is intermediary between some em pirical objects and others. Hence an office of transforma tion was converted into an act of original and fina creation. A conversion of actual immediate objects int *better*, into more secure and significant, objects wa treated as a movement from merely apparent and pheno mental Being to the truly Real. In short, idealism i guilty of neglect that thought and knowledge ar histories.

To call action of thought in constituting objects direc is the same as to say that it is miraculous. For it is no thought as idealism defines thought which exercises th reconstructive function. Only action, interaction, ca change or remake objects. The analogy of the skille artist still holds. His intelligence is a factor in formin new objects which mark a fulfillment. But this is be cause intelligence is incarnate in overt action, usin things as means to affect other things. "Thought, reason, intelligence, whatever word we choose to us is existentially an adjective (or better an adverb), no a noun. It is disposition of activity, a quality of tha

conduct which foresees consequences of existing events, and which uses what is foreseen as a plan and method of administering affairs.

This theory, explicitly about thought as a condition of science, is actually a theory about nature. It involves attribution to nature of three defining characteristics. In the first place, it is implied that some natural events are endings whether enjoyed or obnoxious, which occur, apart from reflective choice and art, only casually, without control. In the second place, it implies that events, being events and not rigid and lumpy substances, are ongoing and hence as such unfinished, incomplete, indeterminate. Consequently they possess a possibility of being so managed and steered that ends may become fulfilments not just termini, conclusions not just closings. Suspense, doubt, hypotheses, experiment with alternatives are exponents of this phase of nature. In the third place, regulation of ongoing and incomplete processes in behalf of selected consequences, implies that there are orders of sequence and coexistence involved; these orders or relations when ascertained are intellectual means which enable us to use events as concrete means of directing the course of affairs to forecast conclusions. The belief that these orders of relation, which are the appropriate object of science, are therefore the sole ultimately "real" objects is the source of that assertion of a symmetrical dovetailed and completed universe made by both traditional materialism and idealism. The belief is due to neglect of the fact that such relations are always relations of ongoing affairs characterized by beginnings and endings which mark them off into unstable individuals. Yet this neglected factor is empirically so

pervasive and conspicuous that it has to be acknowledged in some form; it is usually acknowledged in a back-handed way—and one which confuses subsequent reflection—by attributing all qualities inconsistent with nature thus defined to "finite" mind, in order to account for ignorance, doubt, error and the need of inference and inquiry.

If nature is as finished as these schools have defined it to be, there is no room or occasion in it for such a mind; it and the traits it is said to possess are literally supernatural or at least extra-natural.

A realist may deny this particular hypothesis that, existentially, mind designates an instrumental method of directing natural changes. But he cannot do so in virtue of his realism; the question at issue is what the real is. If natural existence is qualitatively individualized or genuinely plural, as well as repetitious, and if things have both temporal quality and recurrence or uniformity, then the more realistic knowledge is, the more fully it will reflect and exemplify these traits. Science seizes upon whatever is so uniform as to make the changes of nature rhythmic, and hence predictable. But the contingencies of nature make discovery of these uniformities with a view to prediction needed and possible. Without the uniformities, science would be impossible. But if they alone existed, thought and knowledge would be impossible and meaningless. The incomplete and uncertain gives point and application to ascertainment of regular relations and orders. These relations in themselves are hypothetical, and when isolated from application are subject-matter of mathematics (in a non-existential sense). Hence the *ultimate* objects of science are *guided* processes of change.

Sometimes the use of the word "truth" is confined to designating a logical property of propositions; but if we extend its significance to designate character of existential reference, this is the meaning of truth: processes of change so directed that they achieve an intended consummation. Instrumentalities are actually such only in operation; when they operate, an end in-view is in process of actualization. The means is fully a means only *in* its end. The instrumental objects of science are completely themselves only as they direct the changes of nature toward a fulfilling object. Thus it may be said intelligibly and not as mere tautology that the end of science is knowledge, implying that knowledge is more than science, being its fruit.

Knowledge is a word of various meanings. Etymologically, "science" may signify tested and authentic instance of knowledge. But knowledge has also a meaning more liberal and more humane. It signifies events understood, events so discriminately penetrated by thought that mind is literally at home in them. It means comprehension, or inclusive reasonable agreement. What is sometimes termed "applied" science, may then be more truly science than is what is conventionally called pure science. For it is directly concerned with not just instrumentalities, but instrumentalities at work in effecting modifications of existence in behalf of conclusions that are reflectively preferred. Thus conceived the characteristic subject-matter of knowledge consists of fulfilling objects, which as fulfillments are connected with a history to which they give character. Thus conceived, knowledge exists in engineering, medicine and the social arts more adequately than it does in mathematics, and physics.

Thus conceived, history and anthropology are scientifi in a sense in which bodies of information that stop shor with general formulae are not.

"Application" is a hard word for many to accept. I suggests some extraneous tool ready-made and complete which is then put to uses that are external to its nature To call the arts applications of science is then to introduc something foreign to the sciences which the latter irrel evantly and accidentally serve. Since the applicatio is in human use, convenience, enjoyment and improve ment, this view of application as something external an arbitrary reflects and strengthens the theories which detach man from nature, which, in the language o philosophy, oppose subject and object. But if we fre ourselves from preconceptions, application of "science means application *in*, not application *to*. Applicatio *in* something signifies a more extensive interaction o natural events with one another, an elimination of dis tance and obstacles; provision of opportunities for in teractions that reveal potentialities previously hidde and that bring into existence new histories with new initia tions and endings. Engineering, medicine, social art realize relationships that were unrealized in actual exist ences. Surely in their new context the latter are unde stood or known as they are not in isolation. Prejudic against the abstract, as something remote and technica is often irrational; but there is sense in the convictio that in the abstract there is something lacking whic should be recovered. The serious objection to "applied science lies in limitation of the application, as to privat profit and class advantage.

"Pure" science is of necessity relational and abstract: it fulfills its meaning and gains full truth when included within a course of concrete events. The proposition that "pure" science is non-existential is a tacit admission that only "applied" science is existential. Something else than history and anthropology lose all scientific standing when standards of "purity" are set up as ultimate; namely, all science of existential events. There is superstitious awe reflected in the current estimate of science. If we could free ourselves from a somewhat abject emotion, it would be clear enough that what makes any proposition scientific is its power to yield understanding, insight, intellectual at-homeness, in connection with any existential state of affairs, by filling events with coherent and tested meanings. The case of history is typical and basic. Upon the current view, it is a waste of time to discuss whether there can be such a thing as a science of history. History and science are by definition at opposite poles. And yet if all natural existences *are* histories, divorce between history and the logical mathematical schemes which are the appropriate objects of pure science, terminates in the conclusion that of existences there is no science, no adequate knowledge. Aside from mathematics, all knowledge is historic; chemistry, geology, physiology, as well as anthropology and those human events to which, arrogantly, we usually restrict the title of history. Only as science is seen to be fulfilled and brought to itself in intelligent management of historical processes in their continuity can man be envisaged as within nature, and not as a supernatural extrapolation. Just because nature is what it is, history is capable of being more truly known

—understood, intellectually realized—than are mathe matical and physical objects. Do what we can, ther always remains something recondite and remote in th latter, until they are restored in the course of affair from which they have been sequestrated. While th humanizing of science contributes to the life of humanity it is even more required in behalf of science, in order tha it may be intelligible, simple and clear; in order that it ma have that correspondence with reality which true knowl edge claims for itself.

One can understand the sentiment that animates th bias of scientific inquirers against the idea that all scienc is ultimately applied. It is justified in the sense in whic it is intended; for it is directed against two conception which are harmful, but which, also, are irrelevant to th position here taken. One of these conceptions is that th concern or personal motive of the inquirer should b in each particular inquiry some specific practical applica tion. This is just as it happens to be. Doubtless man important scientific discoveries have been thus instigated but that is an incident of human history rather than o scientific inquiry as such. And upon the whole, or if thi animating interest were to become general, the undoubte effect is limitation of inquiry and thereby in the end o the field of application. It marks a recurrence to th dogma of fixed predetermined ends, while emancipatio from the influence of this dogma has been the chie service rendered modern scientific methods.

The evil thus effected is increased by the second notion namely, that application is identical with "commercialized use. It is an incident of human history, and a rathe appalling incident, that applied science has been so largel

made an equivalent of use for private and economic class purposes and privileges. When inquiry is narrowed by such motivation or interest, the consequence is in so far disastrous both to science and to human life. But this limitation does not spring from nor attach to the conception of "application" which has been just presented. It springs from defects and perversions of morality as that is embodied in institutions and their effects upon personal disposition. It may be questioned whether the notion that science is pure in the sense of being concerned exclusively with a realm of objects detached from human concerns has not conspired to reinforce this moral deficiency. For in effect it has established another class-interest, that of intellectualists and aloof specialists. And it is of the nature of any class-interest to generate and confirm other class-interests, since division and isolation in a world of continuities are always reciprocal. The institution of an interest labelled ideal and idealistic in isolation tends of necessity to evoke and strengthen other interests lacking ideal quality. The genuine interests of "pure" science are served only by broadening the idea of application to include all phases of liberation and enrichment of human experience.

CHAPTER FIVE

Nature, Communication and Meaning

Of all affairs, communication is the most wonderful That things should be able to pass from the plane of exter nal pushing and pulling to that of revealing themselve to man, and thereby to themselves; and that the fruit o communication should be participation, sharing, is a wonder by the side of which transubstantiation pales When communication occurs, all natural events are sub ject to reconsideration and revision; they are re-adapte to meet the requirements of conversation, whether it b public discourse or that preliminary discourse terme thinking. Events turn into objects, things with a mean ing. They may be referred to when they do not exist and thus be operative among things distant in space an time, through vicarious presence in a new medium. Brut efficiencies and inarticulate consummations as soon a they can be spoken of are liberated from local and acci dental contexts, and are eager for naturalization in an non-insulated, communicating, part of the world. Event when once they are named lead an independent and doubl life. In addition to their original existence, they ar subject to ideal experimentation: their meanings may b infinitely combined and re-arranged in imagination, an the outcome of this inner experimentation—which i thought—may issue forth in interaction with crude c raw events. Meanings having been deflected from th rapid and roaring stream of events into a calm and tra versible canal, rejoin the main stream, and color, tempe

and compose its course. Where communication exists, things in acquiring meaning, thereby acquire representatives, surrogates, signs and implicates, which are infinitely more amenable to management, more permanent and more accommodating, than events in their first estate. By this fashion, qualitative immediacies cease to be dumbly rapturous, a possession that is obsessive and an incorporation that involves submergence: conditions found in sensations and passions. They become capable of survey, contemplation, and ideal or logical elaboration; when something can be said of qualities they are purveyors of instruction. Learning and teaching come into being, and there is no event which may not yield information. A directly enjoyed thing adds to itself meaning, and enjoyment is thereby idealized. Even the dumb pang of an ache achieves a significant existence when it can be designated and descanted upon; it ceases to be merely oppressive and becomes important; it gains importance, because it becomes representative; it has the dignity of an office.

In view of these increments and transformations, it is not surprising that meanings, under the name of forms and essences, have often been hailed as modes of Being beyond and above spatial and temporal existence, invulnerable to vicissitude; nor that thought as their possession has been treated as a non-natural spiritual energy, disjoined from all that is empirical. Yet there is a natural bridge that joins the gap between existence and essence; namely communication, language, discourse. Failure to acknowledge the presence and operation of natural interaction in the form of communication creates the gulf between existence and essence, and that gulf is factitious and gratuitous.

The slight respect paid to larger and more pervasive kinds of empirical objects by philosophers, even by professed empiricists, is apparent in the fact that while they have discoursed so fluently about many topics they have discoursed little about discourse itself. Anthropologists philologists and psychologists have said most that has been said about saying. Nevertheless it is a fact of such distinction that its occurrence changed dumb creatures—as we so significantly call them—into thinking and knowing animals and created the realm of meanings. Speaking from the standpoint of anthropology Franz Boas says "The two outer traits in which the distinction between the minds of animals and man finds expression are the existence of organized articulate speech in man and the use of utensils of varied application."[1] It is antecedently probable that sole external marks of difference are more than external; that they have intimate connection with such intrinsic differences as religion, art and science, industry and politics. "Utensils" were discussed in the last chapter, in connection with the useful arts and knowledge and their indispensable relation with science pointed out. But at every point appliances and application, utensils and uses, are bound up with directions, suggestions and records made possible by speech; what has been said about the role of tools is subject to a condition supplied by language, the tool of tools.

Upon the whole, professed transcendentalists have been more aware than have professed empiricists of the fact that language makes the difference between brute and man. The trouble is that they have lacked naturalistic conception of its origin and status. Logos has been con

[1] The Mind of Primitive Man, p. 98.

rectly identified with mind; but logos and hence mind was conceived supernaturally. Logic was thereby supposed to have its basis in what is beyond human conduct and relationships, and in consequence the separation of the physical and the rational, the actual and the ideal, received its traditional formulation.

In protest against this view empirical thinkers have rarely ventured in discussion of language beyond reference to some peculiarity of brain structure, or to some psychic peculiarity, such as tendency to "outer expression" of "inner" states. Social interaction and institutions have been treated as products of a ready-made *specific* physical or mental endowment of a self-sufficing individual, wherein language acts as a mechanical go-between to convey observations and ideas that have prior and independent existence. Speech is thus regarded as a practical convenience but not of fundamental intellectual significance. It consists of "mere words," sounds, that happen to be associated with perceptions, sentiments and thoughts which are complete prior to language. Language thus, "expresses" thought as a pipe conducts water, and with even less transforming function than is exhibited when a wine-press "expresses" the juice of grapes. The office of signs in creating reflection, foresight and recollection is passed by. In consequence, the occurrence of ideas becomes a mysterious parallel addition to physical occurrences, with no community and no bridge from one to the other.

It is safe to say that psychic events, such as are anything more than reactions of a creature susceptible to pain and diffuse comfort, have language for one of their conditions. It is altogether likely that the "ideas" which Hume found

in constant flux whenever he looked within himself were a succession of words silently uttered. Primary to these events there was, of course, a substratum of organic psycho-physical actions. But what made the latter identifiable objects, events with a perceptible character was their concretion in discourse. When the introspectionist thinks he has withdrawn into a wholly private realm of events disparate in kind from other events, made out of mental stuff, he is only turning his attention to his own soliloquy. And soliloquy is the product and reflex of converse with others; social communication not an effect of soliloquy. If we had not talked with others and they with us, we should never talk to and with ourselves. Because of converse, social give and take, various organic attitudes become an assemblage of persons engaged in converse, conferring with one another, exchanging distinctive experiences, listening to one another, over-hearing unwelcome remarks, accusing and excusing. Through speech a person dramatically identifies himself with potential acts and deeds; he plays many rôles, not in successive stages of life but in a contemporaneously enacted drama. Thus mind emerges.

It is significant of the differences between Greek and modern experience, that when their respective philosophers discovered discourse, they gave such different accounts of it. The moderns made of it a world separate from spatial and material existences, a separate and private world made of sensations, images, sentiments. The Greeks were more nearly aware that it was *discourse* they had discovered. But they took the structure of discourse for the structure of things, instead of for the form which things assume under the pressure and opportunity

of social cooperation and exchange. They overlooked the fact that meanings as objects of thought are entitled to be called complete and ultimate only because they are not original but are a happy outcome of a complex history. They made them primitive and independent forms of things, intrinsically regulative of processes of becoming. They took a work of social art to be nature independent of man. They overlooked the fact that the import of logical and rational essences is the consequence of social interactions, of companionship, mutual assistance, direction and concerted action in fighting, festivity, and work. Hence they conceived of ideal meanings as the ultimate framework of events, in which a system of substances and properties corresponded to subjects and predicates of the uttered proposition. Things conformed naturally and exactly to parts of speech, some being inherently subject-matter of nouns, proper and common; others of verbs, of which some expressed self-activity, while others designated adjectival and adverbial changes to which things are exposed on account of their own defects; some being external relations in which substances stand to one another, and subject-matter of prepositions.

The resulting theory of substances, essential properties, accidental qualities and relations, and the identification of Being, (by means of the copula "is") with the tenses of the verb, (so that the highest Being was, is now, and ever shall be, in contrast to existence now and then, occasional, wholly past, merely just now, or possibly at some passing time in the future) controlled the whole scheme of physics and metaphysics, which formed the philosophic tradition of Europe. It was a natural consequence of the insight that things, meanings, and words correspond.

The insight was perverted by the notion that the correspondence of things and meanings is prior to discourse and social intercourse. Hence, every true affirmation was an assertion of the fixed belonging to one another of two objects in nature; while every true denial was an assertion of intrinsic exclusion of one object by another. The consequence was belief in ideal essences, individually complete, and yet connected in a system of necessary subordinations and dependencies. Dialectic of their relationships, definition, classification, division in arranging essences, constituted scientific truth about the inmost constituents of nature. Thus a discovery which is the greatest single discovery of man, putting man in potential possession of liberation and of order, became the source of an artificial physics of nature, the basis of a science, philosophy and theology in which the universe was an incarnate grammatical order constructed after the model of discourse.

The modern discovery of inner experience, of a realm of purely personal events that are always at the individual's command, and that are his exclusively as well as inexpensively for refuge, consolation and thrill is also a great and liberating discovery. It implies a new worth and sense of dignity in human individuality, a sense that an individual is not a mere property of nature, set in place according to a scheme independent of him, as an article is put in its place in a cabinet, but that he adds something, that he marks a contribution. It is the counterpart of what distinguishes modern science, experimental, hypothetical; a logic of discovery having therefore opportunity for individual temperament, ingenuity, invention. It is the counterpart of modern politics, art, religion

and industry where individuality is given room and movement, in contrast to the ancient scheme of experience, which held individuals tightly within a given order subordinated to its structure and patterns. But here also distortion entered in. Failure to recognize that this world of inner experience is dependent upon an extension of language which is a social product and operation led to the subjectivistic, solipsistic and egotistic strain in modern thought. If the classic thinkers created a cosmos after the model of dialectic, giving rational distinctions power to constitute and regulate, modern thinkers composed nature after the model of personal soliloquizing.

Language considered as an experienced event enables us to interpret what really happened when rational discourse and logic were discovered by the ancients, and when 'inner' experience and its interest were discovered by moderns. Language is a natural function of human association; and its consequences react upon other events, physical and human, giving them meaning or significance. Events that are objects or significant exist in a context where they acquire new ways of operation and new properties. Words are spoken of as coins and money. Now gold, silver, and instrumentalities of credit are first of all, prior to being money, physical things with their own immediate and final qualities. But as money they are substitutes, representations, and surrogates, which embody relationships. As a substitute, money not merely facilitates exchange of such commodities as existed prior to its use, but it revolutionizes as well production and consumption of all commodities, because it brings into being new transactions, forming new histories and affairs. Ex-

change is not an event that can be isolated. It marks the emergence of production and consumption into a new medium and context wherein they acquire new properties.

Language is similarly not a mere agency for economizing energy in the interaction of human beings. It is a release and amplification of energies that enter into it, conferring upon them the added quality of meaning. The quality of meaning thus introduced is extended and transferred, actually and potentially, from sounds, gestures and marks, to all other things in nature. Natural events become messages to be enjoyed and administered, precisely as are song, fiction, oratory, the giving of advice and instruction. Thus events come to possess characters as they are demarcated, and noted. For character is general and distinguished.

When events have communicable meaning, they have marks, notations, and are capable of con-notation and de-notation. They are more than mere occurrences; they have implications. Hence inference and reasoning are possible; these operations are reading the message of things, which things utter because they are involved in human associations. When Aristotle drew a distinction between sensible things that are more noted—known—to us and rational things that are more noted—known—in themselves, he was actually drawing a distinction between things that operate in a local, restricted universe of discourse, and things whose marks are such that they readily enter into indefinitely extensive and varied discourse.

The interaction of human beings, namely, association, is not different in origin from other modes of interaction. There is a peculiar absurdity in the question of how indi

viduals become social, if the question is taken literally. Human beings illustrate the same traits of both immediate uniqueness and connection, relationship, as do other things. No more in their case than in that of atoms and physical masses is immediacy the whole of existence and therefore an obstacle to being acted upon by and effecting other things. Everything that exists in as far as it is known and knowable is in interaction with other things. It is associated, as well as solitary, single. The catching up of human individuals into association is thus no new and unprecedented fact; it is a manifestation of a commonplace of existence. Significance resides not in the bare fact of association, therefore, but in the consequences that flow from the distinctive patterns of human association. There is, again, nothing new or unprecedented in the fact that assemblage of things confers upon the assembly and its constituents, new properties by means of unlocking energies hitherto pent in. The significant consideration is that assemblage of organic human beings transforms sequence and coexistence into participation.

Gestures and cries are not primarily expressive and communicative. They are modes of organic behavior as much as are locomotion, seizing and crunching. Language, signs and significance, come into existence not by intent and mind but by over-flow, by-products, in gestures and sound. The story of language is the story of the *use* made of these occurrences; a use that is eventual, as well as eventful. Those rival accounts of the origin of language that go by the nicknames of bow-wow, pooh-pooh, and ding-dong theories are not in fact theories of the origin of *language*. They are accounts, of some plausibility, of how and why certain sounds rather than

others were selected to signify objects, acts and situations. If the mere existence of sounds of these kinds constituted language, lower animals might well converse more subtly and fluently than man. But they became language only when used within a context of mutual assistance and direction. The latter are alone of prime importance in considering the transformation of organic gestures and cries into names, things with significance, or the origin of language.

Observable facts of animal experience furnish us with our starting point. "Animals respond to certain stimuli . . . . by the contraction of certain muscles whose functioning is of no direct consequence to the animal itself, but affects other animals by stimulating them to act. . . . . Let us call this class the signaling reflexes. A few, but very diversified examples of the signaling reflexes, are the lighting of a fire-fly, the squeezing out of a black liquid from the ink bladder of a cuttle-fish, the crowing of a rooster . . . . the spreading of its tail by a peacock. These reflex activities affect other animals by stimulating them. . . . . If no other animals are present, or these other animals fail to respond by their own reflexes, the former reflex actions are completely wasted."[2]

Sub-human animals thus behave in ways which have no *direct* consequences of utility to the behaving animal, but which call out certain characteristic responses, sexual, protective, food-finding (as with the cluck of a hen to her chicks), in other animals. In some cases, the act evoked

[2] Max Meyer, The Psychology Of The Other One, 1922, p. 195; a statement of behavioristic psychology that has hardly received the attention it intrinsically deserves.

in other animals has in turn an important consequence for the first agent. A sexual act or a combined protective act against danger is furthered. In other cases, the consequences turn out useful to the species, to a numerically indeterminate group including individuals not yet born. Signaling acts evidently form the basic *material* of language. Similar activities occur without intent in man; thus a babe's scream attracts the attention of an adult and evokes a response useful to the infant, although the cry itself is an organic overflow having no intent. So too a man's posture and facial changes may indicate to another things which the man himself would like to conceal, so that he "gives himself away." "Expression," or signs, communication of meaning, exists in such cases for the observer, not for the agent.

While signaling acts are a material condition of language they are not language nor yet are they its *sufficient* condition. Only from an external standpoint, is the original action even a signal; the response of other animals to it is not to a sign, but, by some preformed mechanism, to a direct stimulus. By habit, by conditioned reflex, hens run to the farmer when he makes a clucking noise, or when they hear the rattle of grain in a pan. When the farmer raises his arms to throw the grain they scatter and fly, to return only when the movement ceases. They act as if alarmed; his movement is thus not a sign of food; it is a stimulus that evokes flight. But a human infant learns to discount such movements, to become interested in them as events preparatory to a desired consummation; he learns to treat them as signs of an ulterior event so that his response is to their meaning. He treats them as means to consequences. The hen's activity is ego-cen-

tric; that of the human being is participative. The latte puts himself at the standpoint of a situation in which tw parties share. This is the essential peculiarity of lan guage, or signs.

A requests *B* to bring him something, to which *A* point say a flower. There is an original mechanism by whic *B* may react to *A*'s movement in pointing. But nativel such a reaction is to the movement, not to the *pointin* not to the object pointed out. But *B* learns that th movement *is* a pointing; he responds to it not in itsel but as an index of something else. His response is trans ferred from *A*'s direct movement to the *object* to which points. Thus he does not merely execute the natura acts of looking or grasping which the movement migh instigate on its own account. The motion of *A* attract his gaze to the thing pointed to; then, instead of jus transferring his response from *A*'s movement to th native reaction he might make to the thing as stimulus, h responds in a way which is a function of *A*'s *relationshi* actual and potential, to the thing. The characteristi thing about *B*'s understanding of *A*'s movement an sounds is that he responds to the thing from the stand point of *A*. He perceives the thing as it may function i *A*'s experience, instead of just ego-centrically. Similarl *A* in making the request conceives the thing not only i its direct relationship to himself, but as a thing capab of being grasped and handled by *B*. He sees the thin as it may function in *B*'s experience. Such is the essen and import of communication, signs and meaning. Som thing is literally made common in at least two differe centres of behavior. To understand is to anticipa together, it is to make a cross-reference which, when act

upon, brings about a partaking in a common, inclusive, undertaking.

Stated in greater detail; *B* upon hearing *A*, makes a preparatory reaction of his eyes, hands and legs in view of the consummatory act of *A*'s possession; he engages in the act of grasping, carrying and tendering the flower to *A*. At the same time, *A* makes a preparatory response to *B*'s consummatory act, that of carrying and proffering the flower. Thus neither the sounds uttered by *A*, his gesture of pointing, nor the sight of the thing pointed to, is the occasion and stimulus of *B*'s act; the stimulus is *B*'s anticipatory share in the consummation of a transaction in which both participate. The heart of language is not "expression" of something antecedent, much less expression of antecedent thought. It is communication; the establishment of cooperation in an activity in which there are partners, and in which the activity of each is modified and regulated by partnership. To fail to understand is to fail to come into agreement in action; to misunderstand is to set up action at cross purposes. Take speech as behavioristically as you will, including the elimination of all private mental states, and it remains true that it is markedly distinguished from the signaling acts of animals. Meaning is not indeed a psychic existence; it is primarily a property of behavior, and secondarily a property of objects. But the behavior of which it is a quality is a distinctive behavior; cooperative, in that response to another's act involves contemporaneous response to a thing as entering into the other's behavior, and this upon both sides. It is difficult to state the exact physiological mechanism which is involved. But about the fact there is no doubt. It constitutes the in-

telligibility of acts and things. Possession of the capacity to engage in such activity is intelligence. Intelligence and meaning are natural consequences of the peculiar form which interaction sometimes assumes in the case of human beings.

Primarily meaning is intent and intent is not personal in a private and exclusive sense. *A* proposes the consummatory possession of the flower through the medium or means of *B*'s action; *B* proposes to cooperate—or act adversely—in the fulfillment of *A*'s proposal. Secondarily, meaning is the acquisition of significance by things in their status in making possible and fulfilling shared cooperation. In the first place, it is the *motion and sounds* of *A* which have meaning, or are signs. Similarly the movements of *B*, while they immediate to him, are signs to *A* of *B*'s cooperation or refusal. But secondarily the *thing* pointed out by *A* to *B* gains meaning. It ceases to be just what it brutely is at the moment, and is responded to in its potentiality, as a means to remote consequences. The flower pointed to for example, *is* portable; but apart from language portability is a brute contingency waiting for its actualization upon circumstance. But when *A* counts upon the understanding and cooperation of *B*, and *B* responds to the intent of *A* the flower *is* contemporaneously portable though not now actually in movement. Its potentiality, or conditioning of consequences, is an immediately recognized and possessed trait; the flower *means* portability instead of simply *being* portable. Animism, the attribution of desire and intent to inanimate things, is no mysterious projection of psychical traits; it is a misinterpretation of a natural fact, namely, that significant things are things

actually implicated in situations of shared or social purpose and execution.

The logic of animism is simple. Since words act upon things indirectly, or as signs, and since words express the significant consequences of things, (the traits for the sake of which they are used), why should not words act also directly upon things to release their latent powers? Since we "call" things by their names, why should they not answer? And if they assist us as our friends do when appealed to, is not this proof they are animated by friendly intent; or if they frustrate us, proof that they are filled with the same traits which inspirit our enemies? "Animism" is thus the consequence of a direct transfer of properties of a social situation to an immediate relationship of natural things to a person. Its legitimate and constant form is poetry, in which things and events are given voice and directly communicate with us.

If we consider the *form* or scheme of the situation in which meaning and understanding occur, we find an involved simultaneous presence and cross-reference of immediacy and efficiency, overt actuality and potentiality, the consummatory and the instrumental. *A* in making the request of *B*, at the same time makes the incipient and preparatory response of receiving the thing at the hands of *B;* he performs in readiness the consummatory act. *B*'s understanding of the meaning of what *A* says, instead of being a mere reaction to sound, is an anticipation of a consequence, while it is also an immediate activity of eyes, legs, and hands in getting and giving the flower to *A*. The flower is the thing which it immediately is, and it also is means of a conclusion. All of this is directly involved in the existence of intelligible speech. No such

simultaneous presence of finality and agency, is possible in things as *purely* physical—in abstraction, that is, of potential presence in a situation of communication. Since we have discovered that all things have a phase of potential communicability, that is, that any conceivable thing may enter into discourse, the retrospective imputation of meanings and logical relationships to bare things is natural; it does no harm, save when the imputation is dogmatic and literal. What a physical event immediately is, and what it *can* do or its relationship are distinct and incommensurable. But when an event has meaning, its potential consequences become its integral and funded feature. When the potential consequences are important and repeated, they form the very nature and essence of a thing, its defining, identifying, and distinguishing form. To recognize the thing is to grasp its definition. Thus we become capable of perceiving things instead of merely feeling and having them. To *perceive* is to acknowledge unattained possibilities; it is to refer the present to consequences, apparition to issue, and thereby to behave in deference to the *connections* of events. As an attitude, perception or awareness is predictive expectancy, wariness. Since potential consequences also *mark* the thing itself, and form its nature, the event thus marked becomes an object of contemplation; as meaning, future consequences already belong to the thing. The act of striving to bring them existentially into the world may be commuted into esthetic enjoyed possession of form.

Essence, as has been intimated, is but a pronounced instance of meaning; to be partial, and to assign *a* meaning to a thing as *the* meaning is but to evince human subjection to bias. Since consequences differ also in their con-

sequence and hence importance, practical good sense may attach to this one-sided partiality, for the meaning seized upon as essence may designate extensive and recurrent consequences. Thus is explained the seeming paradox of the distinction and connection of essence and existence. Essence is never existence, and yet it is the essence, the distilled import, of existence; the significant thing about it, its intellectual voucher, the means of inference and extensive transfer, and object of esthetic intuition. In it, feeling and understanding are one; the meaning of a thing is the sense it makes.

Since the consequences which are liked have an emphatic quality, it is not surprising that many consequences, even though recognized to be inevitable, are regarded as if they were accidental and alien. Thus the very essence of a thing is identified with those consummatory consequences which the thing has when conditions are felicitous. Thus *the* essence, one, immutable and constitutive, which *makes* the thing *what* it is, emerges from the various meanings which vary with varying conditions and transitory intents. When essence is then thought to contain existence as the perfect includes the imperfect, it is because a legitimate, practical measure of reality in terms of importance is illegitimately altered into a theoretical measure.

Discourse itself is both instrumental and consummatory. Communication is an exchange which procures something wanted; it involves a claim, appeal, order, direction or request, which realizes want at less cost than personal labor exacts, since it procures the cooperative assistance of others. Communication is also an immediate enhancement of life, enjoyed for its own sake. The dance is

accompanied by song and becomes the drama; scenes o danger and victory are most fully savored when they ar told. Greeting becomes a ceremonial with its prescribe rites. Language is always a form of action and in it instrumental use is always a means of concerted actio for an end, while at the same time it finds in itself all th goods of its possible consequences. For there is no mod of action as fulfilling and as rewarding as is concerted cor sensus of action. It brings with it the sense of sharin and merging in a whole. Forms of language are un rivalled in ability to create this sense, at first with direc participation on the part of an audience; and then, a literary forms develop, through imaginative identif cation. Greek thinkers had distinguished patterns i Greek literary art of consummatory uses of speech, an the meanings that were discovered to be indispensable t communication were treated as final and ultimate i nature itself. Essences were hypostatized into origina and constitutive forms of all existence.

The idea put forth about the connection of meanin with language is not to be confused with traditiona nominalism. It does not imply that meaning an essence are adventitious and arbitrary. The defect o nominalism lies in its virtual denial of interaction an association. It regarded the word not as a mode of soci action with which to realize the ends of association, bu as an expression of a ready-made, exclusively individua mental state; sensation, image or feeling, which, being a existence, is necessarily particular. For the sound, gestur or written mark which is involved in language is a partic lar existence. But as such it is not a *word*; and it do not become a word by declaring a mental existence; it b

comes a word by gaining meaning; and it gains meaning when its use establishes a genuine community of action. Interaction, operative relationship, is as much a fact about events as are particularity and immediacy. Language and its consequences are characters taken on by natural interaction and natural conjunction in specified conditions of organization. Nominalism ignores organization, and thus makes nonsense of meanings.

Language is specifically a mode of interaction of at least two beings, a speaker and a hearer; it presupposes an organized group to which these creatures belong, and from whom they have acquired their habits of speech. It is therefore a relationship, not a particularity. This consideration alone condemns traditional nominalism. The meaning of signs moreover always includes something common as between persons and an object. When we attribute meaning to the speaker as *his* intent, we take for granted another person who is to share in the execution of the intent, and also something, independent of the persons concerned, through which the intent is to be realized. Persons and thing must alike serve as means in a common, shared consequence. This community of partaking is meaning.

The invention and use of tools have played a large part in consolidating meanings, because a tool is a thing used as means to consequences, instead of being taken directly and physically. It is intrinsically relational, anticipatory, predictive. Without reference to the absent, or "transcendence," nothing is a tool. The most convincing evidence that animals do not "think" is found in the fact is that they have no tools, but depend upon their own relatively-fixed bodily structures to effect results

Because of such dependence they have no way of distinguishing the immediate existence of anything from its potential efficiencies; no way of projecting its consequences to define a nature or essence. Anything whatever used as a tool exhibits distinction and identification. Fire existentially burns; while fire which is employed in order to cook and keep warm, especially after other things, like rubbing sticks together, are used as means to generate it, is an existence having meaning and potential essence. The presence of inflammation and terror or discomfort is no longer the whole story; an occurrence is now an object; and while it is absurd to hold (as idealism virtually does) that the meaning of an existence is the real substance of the existence, it is equally absurd not to recognize the full transformative import of what has happened.

As to be a tool, or to be used as means for consequences is to have and to endow with meaning, language, being the tool of tools, is the cherishing mother of all significance. For other instrumentalities and agencies, the things usually thought of as appliances, agencies and furnishings, can originate and develop only in social groups made possible by language. Things become tools ceremonially and institutionally. The notoriously conventionalized and traditional character of primitive utensils and their attendant symbolizations demonstrate this fact. Moreover, tools and artifices of agency are always found in connection with some division of labor which depends upon some device of communication. The statement can be proved in a more theoretical way. Immediacy as such is transient to the point of evanescence and its flux has to be fixed by some easily recoverable

and recurrent act within control of the organism, like gesture and spoken sounds, before things can be intentionally utilized. A creature might accidentally warm itself by a fire or use a stick to stir the ground in a way which furthered the growth of food-plants. But the effect of comfort ceases with the fire, existentially; a stick even though once used as a lever would revert to the status of being just a stick, unless the *relationship* between it and its consequence were distinguished and retained. Only language, or some form of artificial signs, serves to register the relationship and make it fruitful in other contexts of particular existence. Spears, urns, baskets, snares may have originated accidentally in some consummatory consequence of natural events. But only repetition through concerted action accounts for their becoming institutionalized as tools, and this concert of action depends upon the use of memoranda and communication. To make another aware of the possibility of a use or objective relationship is to perpetuate what is otherwise an incident as an agency; communication is a condition of consciousness.

Thus every meaning is generic or universal. It is something common between speaker, hearer and the thing to which speech refers. It is universal also as a means of generalization. For a meaning is a method of action, a way of using things as means to a shared consummation, and method is general, though the things to which it is applied are particular. The meaning, for example, of portability is something in which two persons and an object share. But portability after it is once apprehended becomes a way of treating other things; it is extended widely. Whenever this is a chance, it is

applied; application ceases only when a thing refuses to be treated in this way. And even then refusal may be only a challenge to develop the meaning of portability until the thing can be transported. Meanings are rules for using and interpreting things; interpretation being always an imputation of potentiality for some consequence.

It would be difficult to imagine any doctrine more absurd than the theory that general ideas or meanings arise by the comparison of a number of particulars, eventuating in the recognition of something common to them all. Such a comparison may be employed to check a suggested widened application of a rule. But generalization is carried spontaneously as far as it will plausibly go; usually much further than it will actually go. A newly acquired meaning is forced upon everything that does not obviously resist its application, as a child uses a new word whenever he gets a chance or as he plays with a new toy. Meanings are self-moving to new cases. In the end, conditions force a chastening of this spontaneous tendency. The scope and limits of application are ascertained experimentally in the process of application. The history of science, to say nothing of popular beliefs, is sufficient indication of the difficulty found in submitting this irrational generalizing tendency to the discipline of experience. To call it *a priori* is to express a fact; but to impute the *a priori* character of the generalizing force of meanings to *reason* is to invert the facts. Rationality is acquired when the tendency becomes circumspect, based upon observation and tested by deliberate experiment.

Meaning is objective as well as universal. Originating as a concerted or combined method of using or enjoy-

ng things, it indicates a possible interaction, not a thing n separate singleness. A meaning may not of course ıave the particular objectivity which is imputed to it, as vhistling does not actually portend wind, nor the cere- nonial sprinkling of water indicate rain. But such magi- :al imputations of external reference testify to the objec- tivity of meaning as such. Meanings are naturally the meaning of something or other; difficulty lies in discrimi- ıating the right thing. It requires the discipline of ordered and deliberate experimentation to teach us that some meanings delightful or horrendous as they are, are meanings communally developed in the process of com- munal festivity and control, and do not represent the polities, and ways and means of nature apart from social arts. Scientific meanings were superadded to esthetic and affectional meanings when objects instead of being defined n terms of their consequences in social interactions and discussion were defined in terms of their consequences with respect to one another. This discrimination per- mitted esthetic and affective objects to be freed from magical imputations, which were due to attributing to them *in rerum natura* the consequences they had in the transmitted culture of the group.

Yet the truth of classic philosophy in assigning objec- tivity to meanings, essences, ideas remains unassailable. It is heresy to conceive meanings to be private, a property of ghostly psychic existences. Berkeley with all his nom- inalism, saw that "ideas," though particular in existence, are general in function and office. His attribution of the ideas which are efficacious in conduct to an order estab- lished by God, while evincing lack of perception of their naturalistic origin in communication or communal inter-

action, manifests a sounder sense of the objectivity o meanings than has been shown by those who eliminate his theology while retaining his psychology. The incon sistency of the sensationalists who, stopping short o extreme scepticism, postulate that some associations o ideas correspond to conjunctions among things is also reluctantly extorted evidence of how intimation of the objectivity of ideas haunts the mind in spite of theory to the contrary.

Meanings are objective because they are modes of natural interaction; such an interaction, although primarily between organic beings, as includes things and energies external to living creatures. The regulative force of legal meanings affords a convenient illustration. A traffic policeman holds up his hand or blows a whistle. His act operates as a signal to direct movements. But it is more than an episodic stimulus. It embodies a rule of social action. Its proximate meaning is its near-by consequences in coordination of movements of persons and vehicles; its ulterior and permanent meaning—essence—is its consequence in the way of security of social movements. Failure to observe the signal subjects a person to arrest, fine or imprisonment. The essence embodied in the policeman's whistle is not an occult reality superimposed upon a sensuous or physical flux and imparting form to it; a mysterious subsistence somehow housed within a psychical event. Its essence is the rule, comprehensive and persisting, the standardized habit, of social interaction, and for the sake of which the whistle is used. The pattern, archetype, that forms the essence of the whistle as a particular noise is an orderly arrangement of the movements of persons, and vehicles

established by social agreement as its consequence. This meaning is independent of the psychical landscape, the sensations and imagery, of the policeman and others concerned. But it is not on that account a timeless spiritual ghost nor pale logical subsistence divorced from events.

The case is the same with the essence of any non-human event, like gravity, or virtue, or vertebrate. Some consequences of the interaction of things concern us; the consequences are not *merely* physical; they enter finally into human action and destiny. Fire burns and the burning is of moment. It enters experience; it is fascinating to watch swirling flames; it is important to avoid its dangers and to utilize its beneficial potencies. When we name an event, calling it fire, we speak proleptically; we do not name an immediate event; that is impossible. We employ a term of discourse; we invoke a meaning, namely, the potential consequences of the existence. The ultimate meaning of the noise made by the traffic officer is the total consequent system of social behavior, in which individuals are subjected, by means of noise, to social coördination; its proximate meaning is a coördination of the movements of persons and vehicles in the neighborhood and directly affected. Similarly the ultimate meaning, or essence, denominated fire, is the consequences of certain natural events within the scheme of human activities, in the experience of social intercourse, the hearth and domestic altar, shared comfort, working of metals, rapid transit, and other such affairs. "Scientifically," we ignore these ulterior meanings. And quite properly; for when a sequential order of changes is determined, the final meaning in immediate enjoyments and appreciations is capable of control.

While classic thought, and its survival in later idealisms, assumed that the ulterior human meanings, meanings of direct association in discourse, are forms of nature apart from their place in discourse, modern thought is given to marking a sharp separation between meanings determined in terms of the causal relationship of things and meanings in terms of human association. Consequently it treats the latter as negligible or as purely private, not the meanings of natural events at all. It identifies the proximate meanings with the only valid meanings, and abstract relations become an idol. To pass over in science the human meanings of the consequences of natural interactions is legitimate; indeed it is indispensable. To ascertain and state meanings in abstraction from social or shared situations is the only way in which the latter can be intelligently modified, extended and varied. Mathematical symbols have least connection with distinctively human situations and consequences; and the finding of such terms, free from esthetic and moral significance, is a necessary part of the technique. Indeed, such elimination of ulterior meanings supplies perhaps the best possible empirical definition of mathematical relations. They are meanings without direct reference to human behavior. Thus an essence becomes wholly "intellectual" or scientific, devoid of consummatory implication; it expresses the purely instrumental without reference to the objects to which the events in question are instrumental. It then becomes the starting point of reflection that may terminate in ends or consequences in human suffering and enjoyment not previously experienced. Abstraction from any particular consequence (which is the same thing as taking instrumentality generally), opens the way to new uses and consequences.

This is what happens when the meaning of the traffic officer's signal is detached from its own context, and taken up into, say, written and published language, a topic of independent consideration by experts or by civic administrators. In being placed in a context of other meanings, (theoretically and scientifically discussed), it is liberated from the contingencies of its prior use. The outcome may be the invention of a new and improved system of semaphores which exercise regulation of human interaction more effectively. Deliberate abstraction, however, from all ulterior human use and consequence is hardly likely to occur in the case of discourse about a signal system. In physical science, the abstraction or liberation is complete. Things are defined by means of symbols that convey only their consequences with respect to one another. 'Water' in ordinary experience designates an essence of something which has familiar bearings and uses in human life, drink and cleansing and the extinguishing of fire. But H_2O gets away from these connections, and embodies in its essence only instrumental efficiency in respect to things independent of human affairs.

The counterpart of classic thought which took ends, enjoyments, uses, not simply as genuine termini of natural events (which they are), but as the essence and form of things independent of human experience, is a modern philosophy which makes reality purely mechanical and which regards the consequences of things in human experience as accidental or phenomenal by-products. In truth, abstraction from human experience is but a liberation from familiar and specific enjoyments, it provides means for detecting hitherto untried consequences, for invention, for the creation of new wants, and new modes of good and

evil. In any sense in which the conception of essence is legitimate, these human consequences are the essence of natural events. Water still has the meanings of water of everyday experience when it becomes the essence H_2O, or else H_2O would be totally meaningless, a mere sound, not an intelligible name.

Meaning, fixed as essence in a term of discourse, may be imaginatively administered and manipulated, experimented with. Just as we overtly manipulate things, making new separations and combinations, thereby introducing things into new contexts and environments, so we bring together logical universals in discourse, where they copulate and breed new meanings. There is nothing surprising in the fact that dialectic (or deduction, as it is termed by moderns) generates new objects; that, in Kantian language, it is "synthetic," instead of merely explicating what is already had. All discourse, oral or written, which is more than a routine unrolling of vocal habits says things that surprise the one that says them, often indeed more than they surprise any one else. Systematic logical discourse, or ratiocination, is the same sort of thing conducted according to stricter rules. Even under the condition of rigid rules the emergence of new meanings is much more similar to what happens in genial conversation than is conventionally supposed. Rules of logical order and consistency appertain to economy and efficiency of combination and separation in generating new meanings; not to meanings as such. They are rules of a certain kind of experimentation. In trying new combinations of meanings, satisfactory consequences or new meanings are hit upon; then they may be arranged in a system. The expert in thought is one who has skill in

naking experiments to introduce an old meaning into different situations and who has a sensitive ear for detecting resultant harmonies and discords. The most "deductive" thought in actual occurrence is a series of trials, observations and selections. In one sense of the ambiguous word intuition, it is a "series of intuitions," and logic is *ex post facto*, expressing a wit that formulates economically the congruities and incongruities that have manifested themselves. Any "syllogism" which is such *ab initio* is performed better by a machine that manipulates symbols automatically than by any "thinker."

This capacity of essences to enter readily into any number of new combinations, and thereby generate further meanings more profound and far reaching than those from which they sprang, gives them a semblance of independent life and career, a semblance which is responsible for their elevation by some thinkers into a realm separate from that of existence and superior to it. Consider the interpretations that have been based upon such essences as four, plus, the square root of minus one. These are at once so manipulable and so fertile in consequences when conjoined with others that thinkers who are primarily interested in their performances treat them not as significant terms of discourse, but as an order of entities independent of human invention and use. The fact that we can watch them and register what happens when they come together, and that the things that happen are as independent of our volition and expectation as are the discoveries of a geographic exploration, is taken as evidence that they constitute entities having subsistent being independently not only of us but of all natural events whatever.

Alternatives are too narrowly conceived. Becaus meanings and essences are not states of mind, because the are as independent of immediate sensation and imagery a are physical things, and because nevertheless they ar not physical things, it is assumed that they are a peculia kind of thing, termed metaphysical, or "logical" in style which separates logic from nature. But there ar many other things which are neither physical nor psych cal existences, and which are demonstrably dependen upon human association and interaction. Such thing function moreover in liberating and regulating subsequen human intercourse; their essence is their contributio to making that intercourse more significant an more immediately rewarding. Take the sort of thin exemplified in the regulation of traffic. The soun of a whistle is a particular existential event numerical separate, with its own peculiar spatial temporal positio This may not be said of the rule or method of social c operative interaction which it manifests and makes effe tive. A continuous way of organized action is not a pa ticular, and hence is not a physical or psychical existenc Yet the consequences of using the method of adjus ing movements, so that they do not interfere with on another, have both a physical and a mental phas Physically, there is modification of the changes in spa which would otherwise occur. Mentally, there are e joyments and annoyances which would not otherwi happen. But no one of these incidents nor all of them p together form the essence or ulterior meaning of the soun of the whistle; they are qualifications of a more secu concert of human activity which, as a consequence of legal order incarnate in the whistling, forms its signi cance.

Discussion of meaning and essence has reached such an impasse and is barbed with such entanglements, that it is further worth while to suggest consideration of legal entities as indicative of escape from the disjunction of essence from existence. What is a Corporation, a Franchise? A corporation is neither a mental state nor a particular physical event in space and time. Yet it is an objective reality, not an ideal Realm of Being. It is an objective reality which has multitudinous physical and mental consequences. It is something to be studied as we study electrons; it exhibits as does the latter unexpected properties, and when introduced into new situations behaves with new reactions. It is something which may be conducted, facilitated and obstructed, precisely as may be a river. Nevertheless it would not exist nor have any meaning and potency apart from an interaction of human beings with one another, an interaction in which external things are implicated. As legal essence, or concerted method of regulated interaction, corporation has its own and its developing career.

Again juridical rule implies jurisdiction; a particular body of persons within a certain territory to whom it applies. The legal significance of an act depends upon *where* it takes place. Yet an act is an interaction, a transaction, not isolated, self-sufficient. The initial stage of an act and the terminating consequences which, between them, determine its meaning, may be far apart in place as well as in time. Where then is the act? What is its locus? The readiest reply is in terms of the beginning of the act. The act was performed where the agent bodily was at the time of its occurrence. Suppose, however, that before discovery, the agent in a criminal transaction

changes his abode and resides within another jurisdictio
The need of security leads to the generation, in its uni
with the conception of jurisdiction, of a new conceptio
or essence, that of extradition, of comity of jurisdictio
New procedures with corresponding new technical co
cepts or meanings then develop by means of which
person charged with crime may be requisitioned a
removed. The concept of jurisdiction in combinatio
with that of security, justice, etc., deductively generat
other concepts.

The process does not stop here. An agent implies
patient. Suppose a person in New York State shoots
bullet across the New Jersey line, and kills some one
that State; or sends poisoned candy by mail to some o
in California who dies from eating it. *Where* is the crim
committed? The guilty person is not within the jurisdi
tion of the State where the death resulted; hence, h
crime by definition, was not committed in that Stat
But since the death did not occur where he was bodi
present at the time, no crime occurred in that jurisdictio
locus being defined in terms of the abode of the agen
The essence, extradition, does not apply because there
no crime for which to extradite him. In short, because
the accepted meaning of jurisdiction, no crime has be
committed anywhere. Such an outcome is evidently pr
judicial to the integrity and security of human associ
tion and intercourse. Thus the element of *transaction*
an act is noted; an act initiated within a given jurisdi
tion becomes a crime when its obnoxious consequenc
occur outside. The locus of the act now extends all th
way from New York to California. Thus two indepen

ent particular events capable of direct observation, together with a connection between them which is inferred, not directly observable, are now included in so simple a meaning as that of the locus of an act. In the traditional language of philosophy, the essence is now ideal or rational, non-sensible. Furthermore a system of legal meanings is developed by modifying different ones with a view to consistency or logical order. Thus the meanings get more independent of the events that led up to them; they may be taught and expounded as a logical system, whose portions are deductively connected with one another.

In civil cases, however, the concept of locus even as thus extended fails to take care of all the consequences which are found to require regulation, by attachment of rights and liabilities to certain classes of acts. A transaction may concern goods or funds which operate in a jurisdiction different to that of either of the parties directly concerned in it. Its consequences include persons living in a third jurisdiction. The ultimate result is a tendency in some case to reverse the earlier and more immediately physical (or spatially limited) concept of jurisdiction with respect to place. Jurisdiction comes to mean "power to deal legally" with a certain specific affair, rather than an "area within which action has occurred": that is, area is defined by power to act, which in turn is determined with respect to consequences found desirable, while originally a concept of fixed area had been employed to fix power of legal action. If it be asked, "where" a transaction is located, the only possible answer, on the basis of legal procedure, appears in many cases to

be that it is located wherever it has consequences which it is deemed socially important to regulate.[3]

Juridical institutions everywhere embody essences which are as objective and coercive with respect to opinions, emotions and sensations of individuals as are physical objects; essences which are general, capable of independent examination; of fruitful connection with one another; and of extension to concrete phenomena not previously related to them. At the same time the origin and nature of such meanings can be empirically described by reference to social interactions and their consequences. They are means of regulating consequences, through establishing a present cross-reference to one another of the diverse acts of interacting agents. If we bear in mind the capacity to transfer such a regulative method to new and previously unconnected universes of discourse, there is nothing astonishing in the fact that a stain may mean an anatomical structure, a change in the size of a mercury column changes in atmospheric pressure and thus probable rain. There is nothing astonishing therefore in the fact that meanings expressed in symbols are capable of yielding a vast and growing system of mathematics. An essence which is a method of procedure can be linked to other methods of procedure so as to yield

[3] In this respect the actual tendency of law (though not always its doctrinal formulations) is further advanced than are views current among philosophers. Compare the discussions as to "where" an illusion is; or what is the locus of past experience, and "where" unrealized possibilities exist. Some writers find satisfaction in locating them "in" the mind, although they also deny that mind is spatial. Then, realizing that the psychical existence "in" which these affairs are located is itself a present particular existence, they find it necessary to place an "essence" or meaning within the skin of the psychical state.

new methods; to bring about a revision of old methods, and form a systematic and ordered whole—all without reference to any application of any method to any particular set of concrete existences, and in complete abstraction from any particular consequences which the methods or logical universals are to regulate. For mathematics, they are as much independent objects as is the material with which a zoologist deals. Comparison with machines like a self-binding reaper or a telephone system is useful. Machines are evolved in human experience, not prior to it or independently of it. But they are objective and compelling with respect to present particular physical and psychical processes; they are general methods of reaching consequences; they are interactions of previously existing physical existences. Moreover, they depend for their efficacy upon other and independent natural existences; they produce consequences only when used in connection with other existences which limit and test their operation. When machines have attained a certain stage of development, engineers may devote themselves to the construction of new machines and to improvements in old machines without specific reference to concrete uses and applications. That is, inventors are guided by the inherent logic of existing machines, by observation of the consistency of relationships which parts of the machine bear to one another and to the pattern of the entire machine. An invention may thus result from purely mathematical calculations. Nevertheless the machine is still a machine, an instrumental device for regulating interactions with reference to consequences.

When the "concept" of a machine, its meaning or essence embodied in a symbol, deductively generates plans

of new machines, essence is fruitful because it was first devised for a purpose. Its subsequent success or failure in fulfilling its purpose, in delivering the desired consequences, together with reflection upon the reason therefore, supply a basis for revising, extending, and modifying the essence in question; thus it has a career and consequence of its own. If we follow the lead of empirically verifiable cases, it would then appear that mathematical and moral essences may be dialectically fruitful, because like other machines they have been constructed for the purpose of securing certain consequences with the minimum of waste and the maximum of economy and efficiency.

Communication is consummatory as well as instrumental. It is a means of establishing coöperation, domination and order. Shared experience is the greatest of human goods. In communication, such conjunction and contact as is characteristic of animals become endearments capable of infinite idealization; they become symbols of the very culmination of nature. That God is love is a more worthy idealization than that the divine is power. Since love at its best brings illumination and wisdom, this meaning is as worthy as that the divine is truth. Various phases of participation by one in another's joy, sorrows, sentiments and purposes, are distinguished by the scope and depth of the objects that are held in common, from a momentary caress to continued insight and loyality. When a psychologist like Bain reduced the "tender emotions" to sensations of contact he indicated a natural organic basis. But he failed to connect even organic contact with its vital function, assimilation and fruitful union; while (what is of greater import)

he failed to note the transformation that this biological function undergoes when its consequences, being noted, become an objective meaning incorporated as its essence in a natural physiological occurrence.

If scientific discourse is instrumental in function, it also is capable of becoming an enjoyed object to those concerned in it. Upon the whole, human history shows that thinking in being abstract, remote and technical has been laborious; or at least that the process of attaining such thinking has been rendered painful to most by social circumstances. In view of the importance of such activity and its objects, it is a priceless gain when it becomes an intrinsic delight. Few would philosophize if philosophic discourse did not have its own inhering fascination. Yet it is not the satisfactoriness of the activity which defines science or philosophy; the definition comes from the structure and function of subject-matter. To say that knowledge as the fruit of intellectual discourse is an end in itself is to say what is esthetically and morally true for some persons, but it conveys nothing about the structure of knowledge; and it does not even hint that its objects are not instrumental. These are questions that can be decided only by an examination of the things in question. Impartial and disinterested thinking, discourse in terms of scrutinized, tested, and related meanings, is a fine art. But it is an art as yet open to comparatively few. Letters, poetry, song, the drama, fiction, history, biography, engaging in rites and ceremonies hallowed by time and rich with the sense of the countless multitudes that share in them, are also modes of discourse that, detached from immediate instrumental consequences of assistance and coöperative action, are ends for most persons. In them

discourse is both instrumental and final. No person remains unchanged and has the same future efficiencies who shares in situations made possible by communication Subsequent consequences may be good or bad, but they are there. The part of wisdom is not to deny the causal fact because of the intrinsic value of the immediate experience. It is to make the immediately satisfactory object the object which will also be most fertile.

The saying of Matthew Arnold that poetry is a criticism of life sounds harsh to the ears of some persons of strong esthetic bent; it seems to give poetry a moral and instrumental function. But while poetry is not a criticism of life in intent, it is in effect, and so is all art. For art fixes those standards of enjoyment and appreciation with which other things are compared; it selects the objects of future desires; it stimulates effort. This is true of the objects in which a particular person finds his immediate or esthetic values, and it is true of collective man. The level and style of the arts of literature, poetry, ceremony amusement, and recreation which obtain in a community furnishing the staple objects of enjoyment in that community, do more than all else to determine the current direction of ideas and endeavors in the community They supply the meanings in terms of which life is judged esteemed, and criticized. For an outside spectator, they supply material for a critical evaluation of the life led by that community.

Communication is uniquely instrumental and uniquely final. It is instrumental as liberating us from the otherwise overwhelming pressure of events and enabling us to live in a world of things that have meaning. It is final as a sharing in the objects and arts precious to a com

munity, a sharing whereby meanings are enhanced, deepened and solidified in the sense of communion. Because of its characteristic agency and finality, communication and its congenial objects are objects ultimately worthy of awe, admiration, and loyal appreciation. They are worthy as means, because they are the only means that make life rich and varied in meanings. They are worthy as ends, because in such ends man is lifted from his immediate isolation and shares in a communion of meanings. Here, as in so many other things, the great evil lies in separating instrumental and final functions. Intelligence is partial and specialized, because communication and participation are limited, sectarian, provincial, confined to class, party, professional group. By the same token, our enjoyment of ends is luxurious and corrupting for some; brutal, trivial, harsh for others; exclusion from the life of free and full communication excluding both alike from full possession of meanings of the things that enter experience. When the instrumental and final functions of communication live together in experience, there exists an intelligence which is the method and reward of the common life, and a society worthy to command affection, admiration, and loyalty.[4]

[4] Since the above was originally written I have found the following by Dr. Malinowski in Ogden and Richards, The Meaning of Meaning: "A word, signifying an important utensil, is used in action, not to comment on its nature or reflect on its properties, but to make it appear, be handed over to the speaker, or to direct another man to its proper use. The meaning of the thing is made up of experiences of its active uses and not of intellectual contemplation. . . . . A word *means* to a native the proper use of the thing for which it stands, exactly as an implement *means* something when it can be handled and means nothing when no active experience is at hand. Similarly a verb, a word for an action, re-

ceives its meaning through active participation in this action. A word is used when it can produce an action, and not to describe one, still less to translate thoughts." (Pp. 488–9.) I know of no statement about language that brings out with the same clearness and appreciation of the force of the fact that language is primarily a mode of action used for the sake of influencing the conduct of others in connection with the speaker. As he says "The manner in which I am using language now, in writing these words, the manner in which the author of a book or a papyrus or hewn inscription has to use it, is a very far-fetched and derivative function of language. In its primitive uses, language functions as a link in concerted human activity, as a piece of human behavior." (P. 474.) He shows that to understand the meaning of savage language, we have to be able to re-instate the whole social context which alone supplies the meaning. While he lists narrative and ceremonial speech as well as active, he shows that the same principle permeates them. "When incidents are told or discussed among a group of listeners, there is, first, the situation of that moment made up of the respective social, intellectual and emotional attitudes of those present. Within this situation, the narrative creates new bonds and sentiments by the emotional appeal of the words. In every case, narrative speech is primarily a mode of social action rather than a mere reflection of thought." (P. 475.) Then there is the use of language "in free, aimless, social intercourse." "In discussing the function of speech in mere sociabilities, we come to one of the bed rock aspects of human nature in society. There is in all human beings the well-known tendency to congregate, to be together, to enjoy each other's company. . . . . Taciturnity means not only unfriendliness but directly a bad character. The breaking of silence, the communion of words, is the first act to establish links of fellowship." (Pp. 476–7.) Here speech has both the instrumental use of re-assurance and the consummatory good of enhanced sense of membership in a congenial whole. Thus communication is not only a means to common ends but is the sense of community, communion actualized. Nothing more important for philosophers to hearken to has been written than Dr. Malinowski's conclusion: "Language is little influenced by thought, but Thought on the contrary having to borrow from action its tool—that is language—is largely influenced thereby. To sum up we can say that the fundamental grammatical categories, universal to all human languages, can be understood only with reference to the pragmatic *Weltanschauung* of primitive man and that, through the use of language, the barbarous primitive categories must have deeply influenced the later philosophies

of man." (P. 498.) He goes on to show its influence in framing categories of (nouns) substance, of action centering around (verbs) objects, and spatial relations—prepositions. And he closes with an express warning against "the old realist fallacy that a word vouches for, or contains, the reality of its meaning. The migration of roots into improper places has given to the imaginary reality of hypostatized meaning a special solidity of its own. For since early experience warrants the substantival existence of anything found within the category of crude substance, of *Protousia*, and subsequent linguistic shifts introduce there such roots as "going", "rest", "motion", etc., the obvious inference is that such abstract entities or ideas live in a world of their own." (P. 509.) Here we have the source of the classic hypostatizing of essence which is described in the text as due to isolating important meanings of things from their context in human interaction.

CHAPTER SIX

Nature, Mind and the Subject

Personality, selfhood, subjectivity are eventual functions that emerge with complexly organized interactions organic and social. Personal individuality has its basi and conditions in simpler events. Plants and non-human animals act *as if* they were concerned that their activity their characteristic receptivity and response, shoul maintain itself. Even atoms and molecules show selective bias in their indifferencies, affinities and repul sions when exposed to other events. With respect t some things they are hungry to the point of greediness in the presence of others they are sluggish and cold. I is not surprising that naïve science imputed appetitio to their own consummatory outcome to all natura processes, and that Spinoza identified inertia and momen tum with inherent tendency on the part of things to con serve themselves in being, and achieve such perfection a belongs to them. In a genuine although not psychi sense, natural beings exhibit preference and centeredness

In regard to the nature of the individual, as in so man other respects, classic and modern philosophies hav pursued opposite paths. In Greek reflection, love of pe fection, or self-completion, was attributed to Being. Th state of self-sufficiency excluding deficiency constitute the individual, significant change being thought of a the coming into being of such a whole. In consequenc in view of the obvious instability of particular existenc such as moderns usually term individuals, a species in

mutable in time and having form was the true individual. What moderns call individuals were particulars, transient, partial, and imperfect specimens of the true individual. Mankind as species is more truly an individual than was this or that man. Although Aristotle criticized his master for giving Being to the genus or universal separate from particulars, he never doubted that the species was a real entity, a metaphysical or existential whole including and characterizing all particulars. A type-form had no separate being; but, being embodied in particulars, it made them an intrinsically unified and marked out class, which as a class was ungenerated and indestructible, perfect and complete.

Modern science has made the conception strange. Yet it was a natural interpretation of things found in ordinary experience. The immediate qualitative differences of things cannot be recognized without noting that things possessed of these qualitative traits fall into kinds, or families. That the family is more lasting, important, and real than any of its members; that the family confers upon its constituents their standing and character, so that those who have no family are outcasts and wanderers, represents a notable situation in most forms of human culture. In such a cultural scheme, those peculiar differences that constitute for us personal individuality are only accidental variations from the family type, the form which marks a kind enables a particular person to be placed, known, identified. The modern habit of using self, "I," mind, and spirit interchangeably is inconceivable when family and commune are solid realities. To the Greeks, a kind was an organized system in which an ideal form unites varying particulars

into a genuine whole, and gives to them distinctive a
recognizable character. The presence in things of t
generic form renders them knowable. Mind is b
the ordered system of all the characters which constitu
kinds, differing among men, differing according to d
ferences of organic constitutions. Upon such a vie
subjectivity, individuality of mind marks an anomal
a failure of realization of objective forms on the part of t
indwelling family to impress itself adequately, owing
stubborn resisting material constitution. What is priz
and exalted by moderns as individual was just the defe
which is the source of ignorance, opinion, and error.

Such a marked difference in the estimate of the stat
of individuality is proof of difference in the empiric
content of ancient and modern culture. In primiti
cultures, experience is dominated by what a contempora
French school has called categories of participation a
incorporation. Life and being belong in a significa
sense to the tribe and family; particular creatures a
only members of a consolidated whole. This state
social affairs formed the pattern in accord with which
natural events were construed. One need not endor
all the details of the theories of this French school
even accept its general principles, in order to recogni
a predominantly collectivistic character in early cultu
and to perceive its influence upon early beliefs and mod
of thought. An individual was a member of a grou
whole; in this membership were almost exhausted h
accomplishments and possibilities. From birth, he w
a subject for assimilation and incorporation of grou
traditions and customs; his personal measure was t
extent in which he became their vehicle. Private beli

and invention, were a deviation, a dangerous eccentricity, signs of disloyal disposition. The private was an equivalent of the illicit; and all innovations and departures from custom are illicit:—witness the fact that children have to be educated and inducted into tradition and custom. This need of education, moreover, and of maintenance of tradition against deviation serve to bring otherwise unconscious customs to mind, and to render consciousness of them acute and emotional.[1] Thereby, customs are more than mere overt ways of action; tradition is more than external imitation and reproduction of what obtains in outward behavior. Custom is Nomos, lord and king of all, of emotions, beliefs, opinions, thoughts as well as deeds.

Yet mind in an individualized mode has occasionally some constructive operation. Every invention, every improvement in art, technological, military and political, has its genesis in the observation and ingenuity of a particular innovator. All utensils, traps, tools, weapons, stories, prove that some one exercised at sometime initiative in deviating from customary models and standards. Accident played its part; but *some one* had to observe and utilize the accidental change before a new tool and custom emerged. Men were not wholly and merely subdued to the demands of custom, even when innovations were looked upon as threats to the welfare of the group, defiances of its gods.

As Goldenweiser has said: "Whether it is a pot, basket or blanket that is being manufactured, or the soil

[1] See Boas, The Mind of Primitive Man. Chapter VIII of this book seems to me to supply what is sound in the view of the French school alluded to, free from its exaggerations.

that is being tilled, or an animal that is being hunted or fought—in all of these situations man faces an individual technical task. In all of these directions there is room for the development and exhibition of skill. In industry and the chase, in a sea-faring expedition and a war raid things can be done well and less well. . . . . There is opportunity for comparison of individual efforts, there is rivalry."[2] As a fruit of this rivalry of individuals pace-making occurs; those who excel set a standard for others to come up to; they furnish models of technique to be adopted by others, till gradually or suddenly they initiate a new custom. Even in cultures most committed to reproduction, there is always occurring some creative production, through specific variations, that is, through individuals. Thus, while negatively individuality means something to be subdued, positively it denotes the source of change in institutions and customs. While the negative side is most conscious and most asserted, the positive phase is there and is taken advantage of, even though by stealth and under cover. Upon the whole the imagination and effort of individual technicians and artists were submerged; in idea, the doctrine of fixed wholes with their fixed patterns prevailed. We may well follow the further statements of Dr. Goldenweiser. "When tradition is a matter of the spoken word, the advantage is all on the side of age. The elder is in the saddle;" because he is the most experienced man and the one who best embodies the net experience of the group. The group is small enough to be homogeneous; innovations are conspicuous and focus resentment; customary activities are moreover enmeshed in ceremonialism and have supernatural sanctions; variations when once the

[2] Early Civilization, pp. 407–8.

are adopted become automatic group habits; they endure not as ideas or because of insight into principles, but as "motor habits which represent nothing but knowledge and technical experience rendered mechanical through habituation;" individual "consciousness and ratiocination quickly are incorporated in objective results which are handed down while the thinking perishes; inventions become part of the technical equipment of behavior, not of thought and understanding." Under such circumstances, individual variations of thought remain private reveries or are soon translated into objective established institutions through gradual accumulation of imperceptible variations. The exceptional character of creative individuality is reflected in attribution of the origin of the arts, industrial and political, to gods and semi-divine heroes.

Thus the artist and artisan merely observe, as has been noted in another connection, ready-made models and patterns, and unquestioningly follow procedures antecedently established. Patterns and methods are accepted as belonging to the objective nature of things; there is next to no sense of any connection between them and personal desire and thought; to introduce such a connection would evince a dangerously subversive spirit. The point of view therein displayed is so far from that which animates modern psychology and philosophy that it is not easily recoverable; yet we do not have even today to go far to find a like notion regulative of action and belief. The mechanic who follows blueprints and a procedure dictated by his machine in the production of standardized commodities would, if he were both articulate and uncognizant of inventions by

others, say the same thing. Legal formalities consciousl adopt similar realistic conceptions in politics and moral and find the exhibition of the spirit which they take fo granted in science and industry to be anarchistic an destructive in less technical fields. Standards and pa terns seem to them to be given in the nature of thing the intervention of initiative and invention, of individua ity, are counted contrary to reason as well as to sincerit and loyalty.

When experience is of this sort, an individual worke or demiurge has only to observe and conform. He i but a case to be subsumed in a fixed whole as far as ma be; what is left over is merely quantitative and accidenta Plato found in the arts exemplifications of fixed arche types governing particular processes of change throug imparting to them measure and proportion; hence change as far as knowable were subject in advance to the dialecti of geometry. As in the Philebus, measure comes firs then comes the measured, the symmetrical and beautifu conscious mind and wisdom are in the third rank a observation of measure and the measured antecedentl established. In similar fashion, Aristotle could dra his account of the four fundamental affairs of nature fro analysis of the procedure of artisan, with no suspicio that he was thereby subjecting his metaphysics to a anthropomorphic rendering of nature; setting up th cumulative deposit of individual variations of insigh and skill as the measure of nature. It is inept to charg these thinkers with hypostatizing psychical states an processes. Since their own experience exhibited sub ordination of individualized mind to objects, operation patterns and ends that were preëstablished and presente

ready-made and complete, their metaphysic and logic were in so far a faithful report of what they found. Greek philosophy converted not psychological conditions but positive institutional affairs into cosmic realities. The idea that generalization, purposes, etc., are individual mental processes did not originate until experience had registered such a change that the functions of individualized mind were productive of objective achievements and hence capable of external observation.

When this happened, an extraordinary revolution occurred. The conception of the individual changed completely. No longer was the individual something complete, perfect, finished, an organized whole of parts united by the impress of a comprehensive form. What was prized as individuality was now something moving, changing, discrete, and above all initiating instead of final. As long as deviation of particulars from established order meant disorder, the metaphysics and logic of subordination of parts to the form of a pre-formed whole was reasonable. Mind as individualized could be recognized in other than a pejorative sense only when its variations were social, utilized in generating greater social security and fullness of life. This was possible only when social relationships were heterogeneous and expansive, when demand for initiative, invention and variation exceeded that for adherence and conformity. It is noteworthy that even Plato with all his zeal for a fixed organized whole could not imagine its coming into being save through the effort of some happily constituted and fortunately placed individual. Social heterogeneity alone does not promote a functioning of variations for socially desirable consequences, and thereby constitute

individuality as something objective and socially acknow
edged. It may signify only a break up of pious ac
herence to a cumulative and conserved outcome of pric
history. But let there be a situation in which the trad
tion of order and unity is still vital while the actual stat
of affairs is one of variation and conflict, and there is
situation in which dependence must perforce be placed o
individuality. Even though its office be conceived a
first as merely restorative, a return to an earlier an
better state of affairs, as Italians thinkers would retur
to Greco-Roman culture and the early protestant t
primitive Christianity, yet the operation of individua
rather than that of collective tradition is the hope an
reliance. Under such circumstances, particularized cen
tres of initiation and energy are prized because bein
emancipated from the net work of current forces, the
are free to direct change to new objective consequences

Individualism in modern life has been understood i
diverse ways. To those retaining the classic tradition
it is a revolt of undisciplined barbarians, reverting to th
spontaneous petulant egotism of childhood; in anothe
version of this underlying idea, it is rebellion of unre
generate human nature against divine authority, es
tablished among men for their salvation. To sti
others, it is emancipation, the achieving of voluntar
maturity; courageous independence in throwing off a
external yokes and bondages, in asserting that ever
human being is an end in himself; in effect a transfer t
each conscious unit of honorific predicates previousl
reserved for the class, species, universal. In any cas
an individual is no longer just a particular, a part withou
meaning save in an inclusive whole, but is a subjec
self, a distinctive centre of desire, thinking and aspiratio

An adherent of empirical denotative method can hardly accept either the view which regards subjective mind as an aberration or that which makes it an independent creative source. Empirically, it is an agency of novel reconstruction of a preëxisting order. Criticism of the history of political theory during the formation of modern European states may bring out the difference between such a view and that of both classic universalism and extreme modern subjectivism. The older theory had asserted that the state exists by nature. The modern declared that it existed by means of agreements between individuals who willed the institution of civil order. We may imagine reformers of the seventeenth century saying that the states they found about them did indeed exist by nature—that was precisely what was the matter with them. Because they were natural products, they were products of force, chance, fraud, tyranny. Hence they were naturally the scene of war, foreign and domestic, of servitudes and inequities, of intrigue and harsh coercion —one huge historical accident. A just and good state would be one brought into existence by voluntary convention; by promises exchanged and obligations mutually undertaken. A good state exists not by nature but by the contriving activities of individual selves in behalf of the satisfaction of their needs. It implies art, not nature; a clear perception by individuals of what they want and of the conditions through which their wants can be satisfied. In detail, thinkers divided into opposite schools. Some held that by nature individuals are non-social, becoming social when subjected to discipline by artificial and instituted law to which they are naturally adverse. Others attributed to the natural individual

some degree of friendly and genial inclination. Both schools agreed that just political order, legitimate authority and subordination, is a product of voluntary conjunction of individuals naturally exempt from the universal of civil law.

The truth of which the social compact was a symbol is that social institutions as they exist can be bettered only through the deliberate interventions of those who free their minds from the standards of the order which obtains. The underlying fact was the perception of the possibility of a change, a change for the better, in social organization. The fact that the intent of the perception was veiled and distorted by the myth of an aboriginal single and one-for-all decisive meeting of wills is instructive as an aberration, but the myth should not disguise the intent and consequence. Social conditions were altered so that there were both need and opportunity for inventive and planning activities, initiated by innovating thought, and carried to conclusion only as the initiating mind secured the sympathetic assent of other individuals.

I say individual minds, not just individuals with minds. The difference between the two ideas is radical. There is an easy way by which thinkers avoid the necessity of facing a genuine problem. It starts with a self, whether bodily or spiritual being immaterial for present purposes, and then endows or identifies that self with mind, a formal capacity of apprehension, devising and belief. On the basis of this assumption, any mind is open to entertaining any thought or belief whatever. There is here no problem involved of breaking loose from the weight of tradition and custom, of initiating observations and reflections, forming designs and plans, undertaking experiments or

the basis of hypotheses, diverging from accepted doctrines and traditions. Or when it is observed that this departure occurs infrequently and is not easy, some vague reference to genius and originality disposes of the question. But the whole history of science, art and morals proves that the mind that appears *in* individuals is not as such individual mind. The former is in itself a system of belief, recognitions, and ignorances, of acceptances and rejections, of expectancies and appraisals of meanings which have been instituted under the influence of custom and tradition.

It is not easy to break away from current and established classifications and interpretations of the world. The difficulty in this respect, however, is eased by the notion that after all it is only error that the mind needs to cut loose from, and that it can do this by direct appeal to nature, by applying pure observation and reflection to pure objects. This notion of course is fiction; objects of knowledge are not given to us defined, classified, and labeled, ready for labels and pigeon-holes. We bring to the simplest observation a complex apparatus of habits, of accepted meanings and techniques. Otherwise observation is the blankest of stares, and the natural object is a tale told by an idiot, full only of sound and fury. In the case of social objects and patterns, institutions and arrangements, we have not the benefit of the mitigating fiction of direct correction by appeal of transparent mind to the court of nature. There *is* a contrast between physical objects and objects as they are believed to be, even though what they are believed to be is an unescapable medium in observing what they are. Where is such a contrast to be found in the case of existing social

institutions and standards? The contrast is not, as it seems to be in the case of knowledge of physical existence, between a belief which is defective or false and an existence which is real; it is between an existence which is actual, and a belief, desire and aspiration for something which is better but non-existent.

Such facts exemplify the difference between a bodily or a psychic self *with* a mind and mind *as* individual. Either the better social object is sheer illusion, or else individual thought and desire denote a distinctive and unique mode of existence, an object held in solution, undergoing transformation, to emerge finally as an established and public object. Reference to imagination is pertinent. But the reference is too frequently used to disguise and avoid recognition of the essential fact and the problems involved in it. Imagination as mere reverie is one thing, a natural and additive event, complete in itself a terminal object rich and consoling, or trivial and silly as may be. Imagination which terminates in a modification of the objective order, in the institution of a new object is other than a merely added occurrence. It involves a dissolution of old objects and a forming of new ones in a medium which, since it is beyond the old object and not yet in a new one, can properly be termed subjective.

The point in placing emphasis upon the rôle of individual desire and thought in social life has in part been indicated. It shows the genuinely intermediate position of subjective mind: it proves it to be a mode of natural existence in which objects undergo directed reconstitution. Reference to the place of individual thought in political theory and practice has another value. Unless

subjective intents and thoughts are to terminate in picturesque utopias or dogmas irrelevant to constructive action, they are subject to objective requirements and tests. Even in the crudest form of the contract theory, men had to *do* something. They had at least to meet together, come to agreement, give guarantees, and govern their subsequent conduct by agreements reached, or else suffer a tangible penalty. Thinking and desiring, no matter how subjective, are a preliminary, tentative and inchoate mode of action. They are "overt" behavior of a communicated and public form in process of construction, and behavior involves change of objects which tests the meanings animating behavior.

There is a peculiar intrinsic privacy and incommunicability attending the preparatory intermediate stage. When an old essence or meaning is in process of dissolution and a new one has not taken shape even as a hypothetical scheme, the intervening existence is too fluid and formless for publication, even to one's self. Its very existence is ceaseless transformation. Limits from which and to which are objective, generic, stateable; not so that which occurs between these limits. This process of flux and ineffability is intrinsic to any thought which is subjective and private. It marks "consciousness" as bare event. It is absurd to call a recognition or a conception subjective or mental because it takes place through a physically or socially numerically distinct existence; by this logic a house disappears from the spatial and material world when it becomes *my* house; even a physical movement would then be subjective when referred to particles.

Recognition of an object, conception of a meaning may be mine rather than yours; yours rather than his, at a par-

ticular moment; but this fact is about me or you, no about the object and essence perceived and conceived Acknowledgment of this fact is compatible however with the conviction that after all there would be no *objects* to be perceived, no meanings to be conceived, if at some period of time uniquely individualized events had no intervened. There is a difference in kind between the thought which manipulates received objects and essence to derive new ones from their relations and implications and the thought which generates a new method of observing and classifying them. It is like the difference between readjusting the parts of a wagon to make it more efficient and the invention of the steam locomotive. One is formal and additive; the other is qualitative and transformative. He knows little who supposes that freedom of thought is ensured by relaxation of conventions, censorships and intolerant dogmas. The relaxation supplies opportunity. But while it is a necessary it is not a sufficient condition. *Freedom* of thought denotes freedom of *thinking;* specific doubting, inquiring, suspense creating and cultivating of tentative hypotheses, trials or experimentings that are unguaranteed and that involve risks of waste, loss, and error. Let us admit the case of the conservative; if we once start thinking no one can guarantee where we shall come out, except that many objects, ends and institutions are surely doomed. Every thinker puts some portion of an apparently stable world in peril and no one can wholly predict what will emerge in its place.

In approaching the exaggerations of individual mind found in modern philosophy which go by the name of subjectivism and a large part of what is termed idealism

we may profitably recur to ancient thought. The question of the relation of the objective and subjective did not present itself under that name. The problem of the relation of the "natural" and the "positive" covered at least part of the same ground, and in a way closer to experience than does the course taken by much modern philosophy. The "positive" was a term used to cover everything of distinctively human institution, in languages, customs, manners, codes, laws, governments. The issue was whether nature was a norm for these arrangements or whether they were something to which nature should submit. The classic answer was in the former sense. But there were those who regarded nature as raw, crude, wild, and who thought of man and his doings as the standard and measure of nature.

The former conception, under theological sanctions and interpretations, was adopted into the medieval conception of natural law, and made absolutely controlling in morals and politics, wherever not supplemented by revelation, which after all was revelation of a higher nature. To put the problem in terms of the connection between nature and institutions has an advantage over the isolation of the ego by modern philosophy. It acknowledged the social factor. Even when the origin of the positive was sought in the will, in the decrees and enactments of particular persons, the latter were thought of as possessing a socially representative office, as heroes, lawgivers, not as isolated individual minds.

The complete subordination of the positive to natural law in the medieval version of the classic theory involved modern thought in a peculiar embarrassment when interest in humanity as distinct from divinity revived. The

institutions which men wished to modify, for which they wished to substitute others or to which they wished to add others of a secular sort, were bound up with divinity, with authoritative natural and revealed law. It was not possible to put institutions as such in contrast to nature, for by accepted theory existing institutions were in the main expressions of the law of nature. The resource which offered itself was to place the mind of the individual as such in contrast to both nature and institutions. This historic fact, reinforced with the conspicuous assertion of medievalism that the individual soul is the ultimate end and ultimate subject of salvation or damnation, affords, it seems to me, the background and source of the isolation of the ego, the thinking self, in all philosophy influenced by either the new science or Protestantism. Descartes as well as Berkeley uses "self" as an equivalent of "mind," and does so spontaneously, as a matter of course, without attempt at argument and justification. If the given science of nature and given positive institutions expressed arbitrary prejudice, unintelligent custom and chance episodes, where could or should mind be found except in the independent and self-initiated activities of individuals? Wholesale revolt against tradition led to the illusion of equally wholesale isolation of mind as something wholly individual. Revolting and reforming thinkers like Descartes little noted how much of tradition they repeated and perpetuated in their very protests and reforms.

An adequate recognition of the empirical historical causes of the exaggeration of the ego in modern philosophy, due to its isolation from social customs, and these from the physical world, makes, it seems to me, criticism

of the forms which it has assumed almost unnecessary. Thinkers may start out with a naïve assumption of minds connected with separate individuals. But developments soon show the inadequacy of such "minds" to carry the burden of science and objective institutions, like the family and state. The consequence was revealed to be sceptical, disintegrative, malicious. A transcendental supra-empirical self, making human, or "finite," selves its medium of manifestation, was the logical recourse. Such a conception is an inevitable conclusion, when the value of liberation and utilization of individual capacity in science, art, industry, and politics is a demonstrated empirical fact; and when at the same time, individuality instead of being conceived as historic, intermediate, temporally relative and instrumental, is conceived of as original, eternal and absolute. When concrete reconstructions of natural and social objects are thought of as a single and constitutive act, they inevitably become supernatural or transcendental. When the movement terminates, as in the later philosophy of Josiah Royce, with a "community of selves," the circle has returned to the empirical fact with which it might properly have started out; but the intervening insertion of a transcendent ego remains as a plague. It isolates the community of selves from natural existence and in order to get nature again in connection with mind, is compelled to reduce it to a system of volitions, feelings and thoughts.

It remains to mention another historic factor which helps account for the vogue of subjectivism in art and literature, through which it found its way more or less into common belief. Comte several times recurs to the idea that idiocy represents an excess of objectivism, a

subordination of feelings and impressions to objects a given, while madness marks an excess of subjectivism Still more significant is his added remark, that madnes has to be construed historically and sociologically. Unde primitive conditions all the larger ideas about nature ar reveries constructed in the interest of emotions. Myth were fancies, but they were not insanities because the were the only reply to the challenge of nature which ex isting instrumentalities permitted. Assertion of simila ideas today is insanity, because available intellectua resources and agencies make possible and require radicall different adjustments. To entertain and believe fancie which once were spontaneous and general is today a sig of failure, of mental disequilibration. Inability to emplo the methods of forming and checking beliefs which ar available at a given time, whatever be the source of tha inability, constitutes a disorientation. These considera tions are not introduced to make the offensive insinuatio that philosophic subjectivism is a mode of insanity and philosophic realism a mode of idiocy. The purpose is t suggest that while the tendency to revery, to intellectua somnambulism, is universal, the use made of revery—whic may roughly stand for the subjective element in mind- depends upon contemporary conditions. In one situa tion fancy generates stories which are consistent wit desire and are attractive. These are connected wit ceremonies to which, in addition to their immediate goo external efficiency is imputed. They become nuclei abou which observations and ideas continually gather; they a centres of mental as well as emotional systematization It is no wonder that myths long prevail. When the d velopment of industry and tested inquiry makes it evide

that the actual world will not accept them nor stand for them, their actuating springs remain in full force and the river of revery still flows. It may find public or communicated form in fiction recognized as such, in novel, drama and poetry which are enjoyed, although their objects are not believed in. Or they may remain private, and, with the play of desires and affections that produce them, constitute a new world enjoyed for its own sake—the "inner life."

The popular factor in subjectivism, that which renders philosophic subjectivism intelligible enough to prevent its being regarded as mere vagary, seems to be a confused union of two considerations. On the one hand there is the recognition, enforced by the course of events, of the constructive power of mind as individual, its re-creative function in objects of industry, art, and politics. On the other hand there is the discovery and exploitation of the inner life, a new, readily accessible and cheaply enjoyed esthetic field. The tales that will not be believed when they are told and that cannot be told in forms sufficiently artistic to command the attention of others, may still be told to one's self and afford relief, consolation and thrill. Products of fancy that cannot, because of the advance of knowledge, secure credence as reports of objective events, are castles in the air, but these castles are impregnable inner refuges.

The person who knows nothing of sensations or sensa, as the psychologist and epistemologist talk about them, is nevertheless aware that objects are other than bare things to which beliefs must subject themselves. He is aware that when things escape his power of control, they still generate "impressions" which he can entertain in all

sorts of enjoyable and annoying ways. If he is devoid o ability to regulate conduct in actual employment o objects, this world of impressions will be one in which h loves to dwell. Its materials are pliable and exact n responsibility. He may be utterly innocent of the reduc tion of objects by theorists into conjoined sensations an images; the notion that his table consists largely of image would be to him a wild vagary, contradictory of common sense. But he knows very well that the incidents of lif may produce fancies in him that are more exciting or mor soothing than the incidents themselves. When there i neither the power to renounce revery nor to use it in an objective embodiment, we have a condition in which soi and atmosphere are prepared to find the spirit of subjec tive idealism congenial, even if the technical facts adduce and the dialectic employed in its behalf are beyond reach

Our statements, however, are one-sided, as far as th full scope of the "inner life" is concerned. It is the hom of aspirations and ideals that are noble and that may i time receive fulfillment as well as of figments and air nothings. It may be charged with infinite humor an tragedy. It affords a realm in which king and court foo prince and pauper, meet as equals. It is subject-matte for the philosopher as well as for the rebuffed and wistfu Recall the contrast which Royce had drawn between th dominant externalism of the seventeenth century and th spirit of the eighteenth. "It is no matter whether yo are a philosopher and write essays on 'The Principles o Human Knowledge' or whether you are a heroine in a eighteenth century novel, and write sentimental letter to a friend; you are part of the same movement. Th spirit is dissatisfied with the mathematical order, an

feels unfriendliness among the eternities of seventeenth-century thought. The spirit wants to be at home with itself, well-friended in the comprehension of its inner processes. It loves to be confidential in its heart outpourings, keen in its analysis, humane in its attitude toward life."

We are given to referring the beginnings of subjectivism to Descartes, with his *penseé* as the indubitable certainty, or to Locke with his simple idea as immediate object. Technically or with respect to later dialectical developments, this reference is correct enough. But historically it is wrong. Descartes' thought is the *nous* of classic tradition forced inwards because physical science had extruded it from its object. Its internality is a logical necessity of the attempt to reconcile the new science with the old tradition, not a thing intrinsically important. Similarly Locke's simple idea is the classic Idea, Form or Species dislodged from nature and compelled to take refuge in mind. For Locke, it is coerced by external existence and remains coercive for all subsequent intellectual operations. The subjective as such is alien to Locke's way of thinking; his whole bias is against it, and in favor of what is grounded in nature being a matter of relations already established. The "simple idea" is merely man's available point of contact with the objective order; and in this contact resides its whole import.

From the standpoint of "inner life" the simple idea became however, a sensation, that is, a feeling, a state of mind, an intrinsically interesting event having its own significant career. If this were true of such a rudimentary thing as blue or soft, how much more significantly it holds of imagination and emotion. Inner reveries and

enjoyments constitute freedom to the natural ma
Everywhere else is constraint, whether it be of study,
science, family life, industry, or government. The roa
to freedom by escape into the inner life is no modern di
covery; it was taken by savages, by the oppressed, b
children, long before it was formulated in philosophic
romanticism. The generalized awareness of the fact
new however, and it added a new dimension to chara
teristically modern experience. It created new forms
art and new theories of esthetics, often promulgated b
literary artists who have nothing but contempt for phil
sophical theories as such. Mr. Santayana is a think
whose intent and basis are at one with classic though
But if we note the importance assumed in his thinkin
by the "inward landscape," there is before us a measu
of the pervasive influence of the kind of experience th
was seized upon by Romanticism as the exclusive tru
of experience.

The function of individualized mind in furthering expe
ment and invention and the directed reconstruction
events, together with the discovery that objects of sen
ment and fancy, although rejected by the order of even
in space and time, may form the contents of an inn
and private realm, finds its legitimate outcome in t
conception of experiencing, and in the discrimination
experiencing into a diversity of states and processes. T
the Greeks, experience was the outcome of accumulati
of practical acts, sufferings and perception gradually bu
up into the skill of the carpenter, shoemaker, pilot, farme
general, and politician. There was nothing merely pe
sonal or subjective about it; it was a consolidation, effect
by nature, of particular natural occurrences into actualiz

tion of the forms of such things as are thus and so usually, now and then, upon the whole, but not necessarily and always. Experience was adequate and final for this kind of thing because it was as much their culminating actualization as rational thought was the actualization of the forms of things that are what they are necessarily. To Aristotle, the copula was a true verb, always affected by tense. Things which fully and completely are, have been, will be, and now are exactly the same; their matter is completely mastered by form. Concerning them we can say "is" with demonstrative certainty: such things are few, though supremely good, and are the objects of science. Of other things we can only say that they have been and are not at the present time, or that though not existing at the present moment they may exist at some unspecified future time. Of them we can say "is" only with a perhaps or a probably, since they are subject to chance. In them matter is not wholly subdued to form. Experience is the actualization through an organic body of just these affairs. Experience was not some person's; it was nature's, localized in a body as that body happened to exist by nature.

As was remarked in the introductory chapter one can hardly use the term "experience" in philosophical discourse, but a critic rises to inquire "Whose experience?" The question is asked in adverse criticism. Its implication is that experience by its very nature is owned by some one; and that the ownership is such in kind that everything about experience is affected by a private and exclusive quality. The implication is as absurd as it would be to infer from the fact that houses are usually owned, are mine and yours and his, that possessive reference so per-

meates the properties of being a house that nothing intel ligible can be said about the latter. It is obvious, how ever, that a house can be owned only when it has existenc and properties independent of being owned. The quali ity of belonging to some one is not an all-absorbing mav in which independent properties and relations disappea to be digested into egohood. It is additive; it marks th assumption of a new relationship, in consequence of whic the house, the common, ordinary, house, acquires nev properties. It is subject to taxes; the owner has the righ to exclude others from entering it; he enjoys certai privileges and immunities with respect to it and is alsc exposed to certain burdens and liabilities.

Substitute "experience" for "house," and no other worc need be changed. Experience when it happens has th same dependence upon objective natural events, physica and social, as has the occurrence of a house. It has it own objective and definitive traits; these can be describec without reference to a self, precisely as a house is of brick has eight rooms, etc., irrespective of whom it belongs to Nevertheless, just as for some purposes and with respec to some consequences, it is all important to note the addec qualification of personal ownership of real property, s with "experience." In first instance and intent, it i not exact nor relevant to say "I experience" or "I think." "It" experiences or is experienced, "it" thinks or i thought, is a juster phrase. Experience, a serial cours of affairs with their own characteristic properties anc relationships, occurs, happens, and is what it is. Amon and within these occurrences, not outside of them no underlying them, are those events which are denominate selves. In some specifiable respects and for some specifi

able consequences, these selves, capable of objective denotation just as are sticks, stones, and stars, assume the care and administration of certain objects and acts in experience. Just as in the case of the house, this assumption of ownership brings with it further liabilities and assets, burdens and enjoyments.

To say in a significant way, "*I* think, believe, desire, instead of barely *it* is thought, believed, desired," is to accept and affirm a responsibility and to put forth a claim. It does not mean that the self is the source or author of the thought and affection nor its exclusive seat. It signifies that the self as a centred organization of energies identifies itself (in the sense of accepting their consequences) with a belief or sentiment of independent and external origination. The absurdity of any other conception appears upon examination of such affairs as are designated by "I do not believe" or "I do not like;" in them it is obvious that a relationship of incompatibility between two distinct and denoted objects is contained.

Authorship and liability look in two different ways, one to the past, the other to the future. Natural events—including social habits—originate thoughts and feelings. To say "*I* think, hope and love" is to say in effect that genesis is not the last word; instead of throwing the blame or the credit for the belief, affection and expectation upon nature, one's family, church, or state, one declares one's self to be henceforth a partner. An adoptive act is proclaimed in virtue of which one claims the benefit of future goods and admits liability for future ills flowing from the affair in question. Even in the most "individualistic" society some properties remain communal; and many things, like the bowels of the earth and the

depths of the seas, are unowned by either group or person. The cogent line of defense of the institution of private property is that it promotes prudence, accountability, ingenuity and security, in the production and administration of commodities and resources which exist independently of the relationship of property. In like fashion, not all thoughts and emotions are owned either socially or personally; and either mode of appropriation has to be justified on the basis of distinctive consequences.

Analytic reflection shows that the ordinary conception of causation as a trait belonging to some one thing is the idea of responsibility read backward. The idea that some one thing, or any two or three things, are *the* cause of an occurrence is in effect an application of the idea of credit or blame—as in the Greek αιτία. There is nothing in nature that *belongs* absolutely and exclusively to anything else; belonging is always a matter of reference and distributive assignment, justified in any particular case as far as it works out well. Greek metaphysics and logic are dominated by the idea of inherent belonging and exclusion; another instance of naively reading the story of nature in language appropriate to human association. Modern science has liberated physical events from the domination of the notions of intrinsic belonging and exclusion, but it has retained the idea with exacerbated vigor in the case of psychological events. The elimination of the category from physics and its retention in psychology has provided a seeming scientific basis for the division between psychology and physics, and thereby for the egotism of modern philosophy. Much subjectivism is only a statement of the logical consequences of the doctrine sponsored by psychological "science" of the monop-

olistic possession of mental phenomena by a self; or, after the idea of an underlying spiritual substance became shaky, of the doctrine that mental events as such constitute all there is to selfhood. For the philosophical implications of the latter idea, as far as privacy, monopoly and exclusiveness of causation and belonging are concerned, are similar to those of the older dogma when it was applied to cosmic nature.

Enough, however, of negation. The positive consequence is an understanding of the shift of emphasis from the experienced, the objective subject-matter, the *what*, to the experiencing, the method of its course, the *how* of its changes. Such a shift occurs whenever the problem of control of production of consequences arises. As long as men are content to enjoy and suffer fire when it happens, fire is just an objective entity which is what it is. That it may be taken as a deity to be adored or propitiated, is evidence that its "whatness" is all there is to it. But when men come to the point of *making* fire, fire is not an essence, but a mode of natural phenomena, an order in change, a "how" of a historic sequence. The change from immediate use in enjoyment and suffering is equivalent to recognition of a method of procedure, and of the alliance of insight into method with possibility of control.

The development of the conception of experiencing as a distinctive operation is akin to the growth of the idea of fire-making out of direct experiences with fire. Fire is fire, inherently just what it is; but making fire is relational. It takes thought away from fire to the other things that help and prevent its occurrence. So with experience in the sense of things that are experienced; they are *what* they are. But their occurrence as experi-

enced things is ascertained to be dependent upon atti
tudes and dispositions; the manner of their happening i
found to be affected by the habits of an organic individua
Since myth and science concern the same objects in th
same natural world, sun, moon, and stars, the differenc
between them cannot be determined exclusively on th
basis of these natural objects. A differential has to foun
in distinctive *ways* of experiencing natural objects; it i
perceived that man is an emotional and imaginative a
well as an observing and reasoning creature, and tha
different manners of experiencing affect the status o
subject-matter experienced. Capacity to distinguish be
tween the sun and moon of science and these same thing
as they figure in myth and cult depends upon capacity t
distinguish different attitudes and dispositions of th
subject; the heroes of legend and poetry are discrim
nated from historic characters when memory, imagina
tion and idealizing emotion are taken into the reckoning
Again, it is discovered that the good of some objects i
connected with one way of experiencing, namely appetit
while the acquisition of goodness by other objects i
dependent upon the operation of reflection. In conse
quence, the experienced objects are differentiated as t
their goodness, although good as an essence is unchanged

The importance of modes of experiencing for contr
of experienced objects may be illustrated from econom
theory. A study of various economic essences or co
cepts is possible:—definition, classification and dialectic
reference to one another of such meanings as valu
utility, rent, exchange, profit, wages, etc. There is als
possible a positivistic study of existential econom
régimes, resulting in description of their structures an

operations. If the presence and operation of dispositions and attitudes be neglected, these alternatives exhaust the field of inquiry. Neither the study of objective essences nor of objective existences is available, however, in problems of polity, in management of economic events. When the "psychological" factor is introduced, say, a study of the effects of certain ways of experiencing, such as incentives, desires, fatigue, monotony, habit, waste-motions, insecurity, prestige, team work, fashion, *esprit de corps*, and a multitude of like factors, the situation changes. Factors that are within control are specified, and a fuller degree of deliberate administration of events is made possible. The objectivity of events remains what it was, but the discovery of the rôle of personal dispositions in conditioning their occurrence, enables us to interpret and connect them in new ways, ways, which are susceptible of greater regulation than were the other ways. Banks, stores, factories do not become psychical when we ascertain the part played in their genesis and operation by psychological factors; they remain as external to the organism and to a particular mind as ever they were, things experienced as are winds and stars. But we get a new leverage, intellectual and practical, upon them when we can convert description of ready-made events and dialectical relation of ready-made notions into an account of a way of occurrence. For a perceived mode of becoming is always ready to be translated into a *method* of production and direction.

Since modern natural science has been concerned with discovery of conditions of production, to be employed as means for consequences, the development of interest in

attitudes of individual subjects—the psychological interest—is but an extension of its regular business. Knowledge of conditions of the occurrence of experienced objects is not complete until we have included organic conditions as well as extra-organic conditions. Knowledge of the latter may account for a happening in the abstract but not for the concrete or experienced happening. A general knowledge of dispositions and attitudes renders us exactly the same sort of intellectual and practical service as possession of physical constants. The trouble lies in the inadequacy of our present psychological knowledge. And it is probably this deficiency, which renders such psychological knowledge as we possess unavailable for technological control, which, joined to spontaneous interest in "inner" life, has set off psychological subject-matter as a separate world of existence, instead of a discovery of attitudes and dispositions involved in the world of common experience. In truth, attitudes, dispositions and their kin, while capable of being distinguished and made concrete intellectual objects, are never separate existences. They are always *of*, *from*, *toward*, situations and things. They may be studied with a minimum of attention to the things at and away from which they are directed. The things with which they are concerned may for purposes of inquiry be represented by a blank, a symbol to be specifically filled in as occasion demands. But except as ways of seeking, turning from, appropriating, treating things, they have no existence nor significance.

Every type of culture has experienced resistance and frustration. These events are interpreted according to the bias dominating a particular type of culture. To the modern European mind they have been interpreted

as results of the opposed existence of subject and object as independent forms of Being. The notion is now so established in tradition that to many thinkers it appears to be a datum, not an interpretative classification. But the East Indian has envisaged the same phenomena as evidence of the contrast of an illusory world to which corresponds domination by desires and a real world due to emancipation from desires, attained through ascetic discipline and meditation. The Greeks interpreted the same experience on the basis of the cosmic discrepancy of being and becoming, form and matter, as the reluctance of existence to become a complete and transparent medium of meaning. Taken absolutely, the interpretation on the basis of opposition of subject and object has no advantage over the other doctrines; it is a local and provincial interpretation. Taken inherently or absolutely, it has an absurdity from which they are free; for subject and object antithetically defined can have logically no transactions with each other. Taken as a factor in the enterprise of overcoming resistance and reducing the prospects of frustration, statement in terms of distinction of subject and object is intelligible, and is more valuable than the other modes of statement. Object is, as Basil Gildersleeve said, that which objects, that to which frustration is due. But it is also the object*ive;* the final and eventual consummation, an integrated secure independent state of affairs. The subject is that which suffers, is subjected and which endures resistance and frustration; it is also that which attempts subjection of hostile conditions; that which takes the immediate initiative in remaking the situation as it stands. Subjective and objective distinguished as factors in a regulated effort at modification

of the environing world have an intelligible meaning Subjectivism as an "ism" converts this historic, relativ and instrumental status and function into somethin absolute and fixed; while pure "objectivism" is a doctrin of fatalism.

To-day there is marked revival of objectivism, even o externalism. The world of physical science is no longe new and strange; to many it is now familiar; while man of those to whom it is personally unfamiliar take it fo granted on authority. To a considerable extent its sub ject-matter is taking the place of the subject-matter o older creeds as something given ready-made, demandin unhesitating credence and passive acceptance. The doc trine of the opposition of subject and object in knowledg is fading, becoming reminiscent; that sense of strain whic is lacking accompanied transition from one set of belief to another very different set. Only in politics and ecc nomics is the opposition of subject and institutional objec poignant. And even in these fields radical and conservativ increasingly appeal to objects which are collective, non individual. The conservative recurs to the objectivism of established institutions, idealized into intrinsic stabil ity; the radical looks forward to the completed outcome o an objective and necessary economic evolution. In spit of the appeal to the catchwords of individualism, pri vate initiative, voluntary abstinence, personal industry and effort, there is more danger at present that the genuinel creative effort of the individual will be lost than there i of any return to earlier individualism. Everything make for the mass. When private property is talked about the product of individual labor is no longer meant but a legally buttressed institution. Capital is no longe

the outcome of deliberate personal sacrifice, but is an institution of corporations and finance with massive political and social ramifications. Appeals to secure action of a certain sort may use the old words; but the fears and hopes which are now aroused are not really connected with freedom of individual thought and effort, but with the objective foundations of society, established "law and order."

This resort to an objectivism which ignores initiating and re-organizing desire and imagination will in the end only strengthen that other phase of subjectivism which consists in escape to the enjoyment of inward landscape. Men who are balked of a legitimate realization of their subjectivity, men who are forced to confine innovating need and projection of ideas to technical modes of industrial and political life, and to specialized or "scientific" fields of intellectual activity, will compensate by finding release within their inner consciousness. There will be one philosophy, a realistic one, for mathematics, physical science and the established social order; another, and opposed, philosophy for the affairs of personal life. The objection to dualism is not just that it is a dualism, but that it forces upon us antithetical, non-convertible principles of formulation and interpretation. If there is complete split in nature and experience then of course no ingenuity can explain it away; it must be accepted. But in case no such sharp division actually exists, the evils of supposing there is one are not confined to philosophical theory. Consequences within philosophy as such are of no great import. But philosophical dualism is but a formulated recognition of an impassé in life; an impotence in interaction, inability to make effective transition, limi-

tation of power to regulate and thereby to understand
Capricious pragmatism based on exaltation of personal
desire; consolatory estheticism based on capacity for
wringing contemplative enjoyment from even the tragedies of the outward spectacle; refugee idealism based on
rendering thought omnipotent in the degree in which it is
ineffective in concrete affairs;—these forms of subjectivism register an acceptance of whatever obstacles at
the time prevent the active participation of the self in
the ongoing course of events. Only when obstacles are
treated as challenges to remaking of personal desire and
thought, so that the latter integrate with the movement of
nature and by participation direct its consequences, are
opposition and duality rightly understood.

Existentially speaking, a human individual is distinctive opacity of bias and preference conjoined with plasticity and permeability of needs and likings. One trait tends
to isolation, discreteness; the other trait to connection
continuity. This ambivalent character is rooted in nature
whose events have their own distinctive indifferencies
resistances, arbitrary closures and intolerances, and also
their peculiar openness, warm responsiveness, greedy
seekings and transforming unions. The conjunction in
nature of whimsical contingency and lawful uniformity
is the result of these two characters of events. They
persist upon the human plane, and as ultimate characters
are ineradicable. Boundaries, demarcations, abrupt, and
expansive over-reachings of boundaries impartially and
conjunctively mark every phase of human life.

The human individual in his opacity of bias is in so
far doomed to a blind solitariness. He hugs himself in
his isolation and fights against disclosure, the give and

take of communication, as for the very integrity of existence. Even communicable meanings are tinged with color of the uncommunicated; there is a quality of reserve in every publicity. Everything may be done with this irreducible uniqueness except to get rid of it. The sense of it may add a bitter loneliness to experience. It may lead to restless insatiable throwing of the self into every opportunity of external business and dissipation in order to escape from it. It may be cherished, nurtured, developed into a cultivated consolatory detachment from the affairs of life, ending in the delusion of the superiority of the private inner life to all else, or in the illusion that one can really succeed in emancipating himself in his pure inwardness from connection with the world and society. It may express itself in elaborated schemes of self-pity and in bursts of defiant exclamation: Here I stand and cannot otherwise. It may lead to unreasoned loyalty to seemingly lost causes and forlorn hopes—and events may sometimes justify the faith.

Romanticism has made the best and the worst of the discovery of the private and incommunicable. It has converted a pervasive and inevitable color and temper of experience into its substance. In conceiving that this inexpugnable uniqueness, this ultimate singularity, exhausts the self, it has created a vast and somnambulic egotism out of the fact of subjectivity. For every existence in addition to its qualitative and intrinsic boundaries has affinities and active outreachings for connection and intimate union. It is an energy of attraction, expansion and supplementation. The ties and bonds of associated life are spontaneous uncalculated manifestations of this phase of human selfhood, as the union of hydrogen and

oxygen is natural and unpremeditated. Sociability, com
munication are just as immediate traits of the concret
individual as is the privacy of the closet of consciousness
To define one's self within closed limits, and then to tr
out the self in expansive acts that inevitably result in a
eventual breaking down of the walled-in self, are equall
natural and inevitable acts. Here is the ultimat
"dialectic" of the universal and individual. One n
sooner establishes his private and subjective self tha
he demands it be recognized and acknowledged by others
even if he has to invent an imaginary audience or a
Absolute Self to satisfy the demand. And no perso
taught by experience ever escapes the reflection that n
matter how much he does for himself, what endures is onl
what is done for others: an observation however which i
most comforting when it takes the form of attributin
desire to serve others to acts which indulge the exclusiv
self.

In some form or other, the dualism erected betwee
the ego and the world of things and persons represent
failure to attain solution of the problem set by thi
ambiguous nature of the self. It is a formulated accept
ance of oscillation between surrender to the external an
assertion of the inner. In science and in art, especiall
in the art of intercourse, real solutions occur. Privat
bias manages in them to manifest itself in innovations an
deviations, which reshape the world of objects and insti
tutions, and which eventually facilitate communicatio
and understanding. Thereby the final and efficient, th
limiting and the expansive, attain a harmony which the
do not possess in other natural events.

Thus an individual existence has a double status and import. There is the individual that belongs in a continuous system of connected events which reinforce its activities and which form a world in which it is at home, consistently at one with its own preferences, satisfying its requirements. Such an individual is in its world as a member, extending as far as the moving equilibrium of which it is a part lends support. It is a natural end, not as an abrupt and immediate termination but as a fulfillment. Then there is the individual that finds a gap between its distinctive bias and the operations of the things through which alone its need can be satisfied; it is broken off, discrete, because it is at odds with its surroundings. It either surrenders, conforms, and for the sake of peace becomes a parasitical subordinate, indulges in egotistical solitude; or its activities set out to remake conditions in accord with desire. In the latter process, intelligence is born—not mind which appropriates and enjoys the whole of which it is a part, but mind as individualized, initiating, adventuring, experimenting, dissolving. Its possessed powers, its accomplished unions with the world, are now reduced to uncertain agencies to be forged into efficient instrumentalities in the stress and strain of trial.

The individual, the self, centred in a settled world which owns and sponsors it, and which in turn it owns and enjoys, is finished, closed. Surrender of what is possessed, disowning of what supports one in secure ease, is involved in all inquiry and discovery; the latter implicate an individual still to make, with all the risks implied therein. For to arrive at new truth and vision is to alter. The old self is put off and the new self is only forming, and the form

it finally takes will depend upon the unforeseeable result of an adventure. No one discovers a new world without forsaking an old one; and no one discovers a new world who exacts guarantee in advance for what it shall be, or who puts the act of discovery under bonds with respect to what the new world shall do to him when it comes into vision. This is the truth in the exaggeration of subjectivism. Only by identification with remaking the objects that now obtain are we saved from complacent objectivism. Those who do not fare forth and take the risks attendant upon the formation of new objects and the growth of a new self, are subjected perforce to inevitable change of the settled and close world they have made their own. Identification of the bias and preference of selfhood with the process of intelligent remaking achieves an indestructible union of the instrumental and the final. For *this* bias can be satisfied no matter what the frustration of other desires and endeavors.

That an individual, possessed of some mode and degree of organized unity, participates in the genesis of every experienced situation, whether it be an object or an activity, is evident. That the way in which it is engaged affects the quality of the situation experienced is evident. That the way in which it is engaged has consequences that modify not merely the environment but which react to modify the active agent; that every form of life in the higher organisms constantly conserves some consequences of its prior experiences, is also evident. The constancy and pervasiveness of the operative presence of the self as a determining factor in all situations is the chief reason why we give so little heed to it; it is more intimate and omnipresent in experience than the air we breathe. Only

n pathological cases, in delusions and insanities and social
eccentricities, do we readily become aware of it; even in
uch cases it required long discipline to force attentive
bservation back upon the self. It is easier to attribute
uch things to invasion and possession from without,
s by demons and devils. Yet till we understand opera-
ions of the self as the tool of tools, *the* means in all use of
neans, specifying its differential activities in their distinc-
ive consequences in varying qualities of what is experi-
enced, science is incomplete and the use made of it is
t the mercy of an unknown factor, so that the ultimate
nd important consequence is in so far a matter of accident.
ntentions and efforts bring forth the opposite of what was
ntended and striven for, and the result is confusion and
atastrophe. Thus we are brought to a consideration of
he psycho-physical mechanism and functioning of indi-
idual centres of action.

CHAPTER SEVEN

Nature, Life and Body-Mind

A series of cultural experiences exhibits a series of di
verging conceptions of the relation of mind to nature i
general and to the organic body in particular. Gree
experience included affairs that rewarded without wan
and struggle the contemplation of free men; they enjoye
a civic life full and rich with an equable adaptation t
natural surroundings. Such a life seemed to be upon th
whole for those in its full possession a gracious culmina
tion of nature; the organic body was the medium throug
which the culmination took place. Since any create
thing is subject to natural contingency, death was not
problem; a being who is generated shares while he may i
mind and eternal forms, and then piously merges wit
the forces which generated him. But life does not alway
exist in this happy equilibrium: it is onerous and devasta
ing, civil life corrupt and harsh. Under such circun
stances, a spirit which believes that it was created in th
image of a divine eternal spirit, in whose everlastingne
it properly shares, finds itself an alien and pilgrim in
strange and fallen world. Its presence in that wor
and its residence in a material body which is a part of tha
world are an enigma. Again the scene shifts. Nature
conceived to be wholly mechanical. The existence with
nature and as part of it of a body possessed of life, man
festing thought and enjoying consciousness is a myster

This series of experiences with their correspondi
philosophies display characteristic factors in the proble

of life and mind in relation to body. To the Greeks, all life was psyche, for it was self-movement and only soul moves itself. That there should be self-movement in a world in which movement was also up-and-down, to-and-fro, circular, was indeed interesting but not strange or untoward. Evidence of the fact of self-movement is directly had in perception; even plants exhibit it in a degree and hence have soul, which although only vegetative is a natural condition of animal soul and rational mind. Organic body occupies a distinctive position in the hierarchy of being; it is the highest actuality of nature's physical potentialities, and it is in turn the potentiality of mind. Greek thought, as well as Greek religion, Greek sculpture and recreation, is piously attentive to the human body.

In Pauline Christianity and its successors, the body is earthly, fleshly, lustful and passionate; spirit is Godlike, everlasting; flesh is corruptible; spirit incorruptible. The body was conceived in terms of a moral disparagement colored by supernatural religion. Since the body is material, the dyslogy extends to all that is material; the metaphysical discount put upon matter by Plato and Aristotle becomes in ascetic thought a moral and essential discount. Sin roots in the will; but occasions for sin come from the lusts of the body; appetites and desires spring from the body, distract attention from spiritual things; concupiscence, anger, pride, love of money and luxury, worldly ambition, result. Technically, the framework of Aristotelian thought is retained by the scholastics; St. Thomas Aquinas repeats his formulae concerning life and the body almost word for word. But actually and substantially this formal relationship has been dis-

torted and corrupted through the seduction of spirit b
flesh manifest in the fall of man and nature by Adam's si
Add to moral fear of the flesh, interest in resurrection int
the next world for external bliss or woe, and there
present a fullfledged antithesis of spirit and matter. I
spite of this antithesis, however, they are conjoined i
the body of man. Spirit is simple, one, permanent an
indissoluble; matter is multiple, subject to change an
dissolution. The possibility of the conjunction of tw
such opposite things formed a problem. But it woul
have been a remote, technical problem of no interest sav
to a few speculative thinkers, were it not given concret
ness by the notion of an immortality to be spent in bli
or in woe unutterable, and the dependence of this ult
mate destiny upon a life in which lust of the flesh alon
with the world of ambition and the devil of pride, was
standing temptation to sin and thereby an occasion
eternal damnation.

As long as the Aristotelian metaphysical doctrin
persisted that nature is an ordered series fro
lower to higher of potentialities and actualizations,
was possible to conceive of the organic body as normall
the highest term in a physical series and the lowest ter
in a psychical series. It occupied just that intermedia
position where, in being the actualization of the pote
tialities of physical qualities, body was also potentialit
for manifestation of their ideal actualities. Aside fro
moral and religious questions, there was in mediev
thought no special problem attaching to the relation
mind and body. It was just one case of the univers
principle of potentiality as the substrate of ideal actualit
But when the time came when the moral and religiou

associations of spirit, soul, and body persisted in full vigor, while the classic metaphysics of the potential and actual fell into disrepute, the full burden of the question of the relation of body, nature and man, of mind, spirit, and matter, was concentrated in the particular problem of the relation of the body and soul. When men ceased to interpret and explain facts in terms of potentiality and actuality, and resorted to that of causality, mind and matter stood over against one another in stark unlikeness; there were no intermediates to shade gradually the black of body into the white of spirit.

Moreover, both classic and medieval thought supplied influential empirical impetus to the new conception in spite of their theoretically divergent foundation. The old distinction between vegetative, animal and rational souls was, when applied to men, a formulation and justification of class divisions in Greek society. Slaves and mechanical artisans living on the nutritional, appetitive level were for practical purposes symbolized by the body—as obstructions to ideal ends and as solicitations to acts contrary to reason. The good citizen in peace and war was symbolized by the soul proper, amenable to reason, employing thought, but confining its operations after all to mundane matters, infected with matter. Scientific inquirers and philosophers alone exemplified pure reason, operating with ideal forms for the sake of the latter. The claim of this class for inherent superiority was symbolized by *nous*, pure immaterial mind. In Hellenistic thought, the three-fold distinction became that of body, mind or soul and spirit; spirit being elevated above all world affairs and acts, even moral concerns, having purely "spiritual" (immaterial) and religious objects. This doc-

trine fell in with the sharp separation made in Christianity for practical moral purposes, between flesh and spirit, sin and salvation, rebellion and obedience. Thus the abstract and technical Cartesian dualism found prepared for it a rich empirical field with which to blend, and one which afforded its otherwise empty formalism concrete meaning and substance.

The formalism and unreality of the problem remains, however, in the theories which have been offered as its "solutions." They range from the materialism of Hobbes, the apparatus of soul, pineal glands, animal spirits of Descartes, to interactionism, pre-established harmony, occasionalism, parallelism, pan-psychic idealism, epi-phenomenalism, and the *élan vital*—a portentious array. The diversity of solutions together with the dialectical character of each doctrine which render it impregnable to empirical attack, suggest that the trouble lies not so much in the solutions, as in the factors which determine statement of the problem. If this be so, the way out of the snarl is a reconsideration of the conceptions in virtue of which the problem exists. And these conceptions have primarily nothing to do with mind-body; they have to do with underlying metaphysical issues:—the denial of quality in general to natural events; the ignoring in particular of temporal quality and the dogma of the superior reality of "causes."

Empirically speaking, the most obvious difference between living and non-living things is that the activities of the former are characterized by needs, by efforts which are active demands to satisfy needs, and by satisfactions. In making this statement, the terms need, effort and satisfaction are primarily employed in a biological sense.

By need is meant a condition of tensional distribution of energies such that the body is in a condition of uneasy or unstable equilibrium. By demand or effort is meant the fact that this state is manifested in movements which modify environing bodies in ways which react upon the body, so that its characteristic pattern of active equilibrium is restored. By satisfaction is meant this recovery of equilibrium pattern, consequent upon the changes of environment due to interactions with the active demands of the organism.

A plant needs water, carbon dioxide; upon occasion it needs to bear seeds. The need is neither an immaterial psychic force superimposed upon matter, nor is it merely a notional or conceptual distinction, introduced by thought after comparison of two different states of the organism, one of emptiness and one of repletion. It denotes a concrete state of events: a condition of tension in the distribution of energies such as involves pressure from points of high potential to those of low potential, which in turn effects distinctive changes such that the connection with the environment is altered, so that it acts differently upon the environment and is exposed to different influences from it. In this fact, taken by itself, there is nothing which marks off the plant from the physico-chemical activity of inanimate bodies. The latter also are subject to conditions of disturbed inner equilibrium, which lead to activity in relation to surrounding things, and which terminate after a cycle of changes—a terminus termed saturation, corresponding to satisfaction in organic bodies.

The difference between the animate plant and the inanimate iron molecule is not that the former has some-

thing in addition to physico-chemical energy; it lies i
the *way* in which physico-chemical energies are inte
connected and operate, whence different *consequenc*
mark inanimate and animate activity respectively. F
with animate bodies, recovery or restoration of the equili
rium pattern applies to the complex integrated course
history. In inanimate bodies as such, "saturation
occurs indifferently, not in such a way as to tend to mai
tain a temporal pattern of activity. The interactions
the various constituent parts of a plant take place in suc
ways as to tend to continue a characteristically organize
activity; they tend to utilize conserved consequences
past activities so as to adapt subsequent changes to th
needs of the integral system to which they belong. O
ganization is a fact, though it is not an original organi
ing force. Iron as such exhibits characteristics of bia
or selective reactions, but it shows no bias in favor
remaining simple iron; it had just as soon, so to speal
become iron-oxide. It shows no tendency in its inte
action with water to modify the interaction so that co
sequences will perpetuate the characteristics of pure iro
If it did, it would have the marks of a living body, an
would be called an organism. Iron as a genuine consti
uent of an *organized* body acts so as to tend to maintai
the type of activity of the organism to which it belongs

If we identify, as common speech does, the physical
such with the inanimate we need another word to deno
the activity of organisms as such. Psycho-physical
an appropriate term. Thus employed, "psycho-physica
denotes the conjunctive presence in activity of nee
demand-satisfaction, in the sense in which these tern
have been defined. In the compound word, the pref

"psycho" denotes that physical activity has acquired additional properties, those of ability to procure a peculiar kind of interactive support of needs from surrounding media. Psycho-physical does not denote an abrogation of the physico-chemical; nor a peculiar mixture of something physical and something psychical (as a centaur is half man and half horse); it denotes the possession of certain qualities and efficacies not displayed by the inanimate.

Thus conceived there is no problem of the relation of physical *and* psychic. There are specifiable empirical events marked by distinctive qualities and efficacies. There is first of all, *organization* with all which is implied thereby. The problem involved is one of definite factual inquiry. Under exactly what conditions does organization occur, and just what are its various modes and their consequences? We may not be able to answer these questions satisfactorily; but the difficulties are not those of a philosophical mystery, but such as attend any inquiry into highly complex affairs. Organization is an empirical trait of some events, no matter how speculative and dubious theories about it may be; especially no matter how false are certain doctrines about it which have had great vogue—namely, those doctrines which have construed it as evidence of a special force or entity called life or soul. Organization is so characteristic of the nature of some events in their sequential linkages that no theory about it can be as speculative or absurd as those which ignore or deny its genuine existence. Denial is never based on empirical evidence, but is a dialectical conclusion from a preconception that whatever appears later in time must be metaphysically unreal as compared with what is

found earlier, or from a preconception that since the com plex is controlled by means of the simpler, the latter i more "real."

When ever the activities of the constituent parts of a organized pattern of activity are of such a nature as t conduce to the perpetuation of the patterned activity there exists the basis of sensitivity. Each "part" of a organism is itself organized, and so of the "parts" of th part. Hence its selective bias in interactions with environ ing things is exercised so as to maintain *itself*, while als maintaining the whole of which it is a member. Th root-tips of a plant interact with chemical properties o the soil in such ways as to serve organized life activity and in such ways as to exact from the rest of the organism their own share of requisite nutrition. This pervasiv operative presence of the whole in the part and of the par in the whole constitutes susceptibility—the capacity o feeling—whether or no this potentiality be actualized i plant-life. Responses are not merely selective, but ar discriminatory, in behalf of some results rather than others This discrimination is the essence of sensitivity. Thu with organization, bias becomes interest, and satisfac tion a good or value and not a mere satiation of wants o repletion of deficiencies.

However it may be with plants and lower animals, i animals in which locomotion and distance-receptors exist sensitivity and interest are realized as feeling, even thoug only as vague and massive uneasiness, comfort, vigor an exhaustion. A sessile organism requires no premoni tions of what is to occur, nor cumulative embodiments o what has occurred. An organism with locomotion is a vitally connected with the remote as well as with th

nearby; when locomotor organs are accompanied by distance–receptors, response to the distant in space becomes increasingly prepotent and equivalent in effect to response to the future in time. A response toward what is distant is in effect an expectation or prediction of a later contact. Activities are differentiated into the preparatory, or anticipatory, and the fulfilling or consummatory. The resultant is a peculiar tension in which each immediate preparatory response is suffused with the consummatory tone of sex or food or security to which it contributes. Sensitivity, the capacity, is then actualized as feeling; susceptibility to the useful and harmful in surroundings becomes premonitory, an occasion of eventual consequences within life.

On the other hand, a consummation or satisfaction carries with it the continuation, in allied and reinforcing form, of preparatory or anticipatory activities. It is not only a culmination out of them, but is an integrated cumulation, a funded conservation *of* them. Comfort or discomfort, fatigue or exhilaration, implicity sum up a history, and thereby unwittingly provide a means whereby, (when other conditions become present) the past can be unravelled and made explicit. For it is characteristic of feeling that while it may exist in a formless condition, or without configured distinctions, it is capable of receiving and bearing distinctions without end. With the multiplication of sensitive discriminatory reactions to different energies of the environment (the differentiation of sense-organs, extero-ceptors and proprio-ceptors) and with the increase in scope and delicacy of movements (the development of motor-organs, to which internal glandular organs for effecting a requisite redistributuion of energy cor-

respond), feelings vary more and more in quality and intensity.

Complex and active animals *have*, therefore, feelings which vary abundantly in quality, corresponding to distinctive directions and phases—initiating, mediating, fulfilling or frustrating—of activities, bound up in distinctive connections with environmental affairs. They *have* them, but they do not know they have them. Activity is psycho-physical, but not "mental," that is, not aware of meanings. As life is a character of events in a peculiar condition of organization, and "feeling" is a quality of life-forms marked by complexly mobile and discriminating responses, so "mind" is an added property assumed by a feeling creature, when it reaches that organized interaction with other living creatures which is language, communication. Then the qualities of feeling become significant of objective differences in external things and of episodes past and to come. This state of things in which qualitatively different feelings are not just had but are significant of objective differences, is mind. Feelings are no longer just felt. They have and they make *sense*; record and prophesy.

That is to say, differences in qualities (feelings) of acts when employed as indications of acts performed and to be performed and as signs of their consequences, *mean* something. And they mean it directly; the meaning is had as their own character. Feelings make sense; as immediate meanings of events and objects, they are sensations, or, more properly, sensa. Without language, the qualities of organic action that are feelings are pains, pleasures, odors, colors, noises, tones, only potentially and proleptically. With language they are discriminated and iden-

fied. They are then "objectified;" they are immediate raits of things. This "objectification" is not a miraculous ejection from the organism or soul into external nings, nor an illusory attribution of psychical entities to hysical things. The qualities never were "in" the organism; they always were qualities of interactions in which oth extra-organic things and organisms partake. When amed, they enable identification and discrimination of nings to take place as means in a further course of inclusive interaction. Hence they are as much qualities of ne things engaged as of the organism. For purposes of ontrol they may be referred specifically to either the ning or to the organism or to a specified structure of the rganism. Thus color which turns out not to be a reliable sign of external events becomes a sign of, say, a efect in visual apparatus. The notion that sensory ffections discriminate and identify themselves, apart rom discourse, as being colors and sounds, etc., and thus *ipso facto* constitute certain elementary modes of knowledge, even though it be only knowledge of their own xistence, is inherently so absurd that it would never ave occurred to any one to entertain it, were it not for ertain preconceptions about mind and knowledge. Sentiency in itself is anoetic; it exists as any immediate quality exists, but nevertheless it is an indispensable means f any noetic function.

For when, through language, sentience is taken up into system of signs, when for example a certain quality of ne active relationship of organism and environment is amed hunger, it is seen as an organic demand for an xtra-organic object. To term a quality "hunger," to ame it, is to refer to an object, to food, to that which

will satisfy it, towards which the active situation moves Similarly, to name another quality "red," is to direct a interaction between an organism and a thing to som object which fulfills the demand or need of the situation It requires but slight observation of mental growth of child to note that organically conditioned qualities, includ ing those special sense-organs, are discriminated only a they are employed to designate objects; red, for instance as the property of a dress or toy. The difficulty in th way of identifying the qualities of acts conditioned b proprio-ceptor organs is notoriously enormous. The just merge in the general situation. If they entered int communication as shared means to social consequence they would acquire the same objective distinctiveness a do qualities conditioned by the extero-ceptor organs. O the other hand, the qualities of the latter are just shade of the general tone of situations until they are used, i language, as common or shared means to common ends Then they are identified as traits of objects. The chil has to learn through social intercourse that certain qual ties of action mean greediness or anger or fear or rude ness; the case is not otherwise with those qualities whic are identified as red, musical tone, a foul odor. Th latter may have instigated nausea, and "red" may hav excited uneasiness (as blood makes some persons faint) but discrimination of the nauseating object *as* foul odo and of the excitation *as* red occurs only when they ar designated as signs.

The qualities of situations in which organisms an surrounding conditions interact, when discriminated, mak sense. Sense is distinct from feeling, for it has a recog nized reference; it is the qualitative characteristic

omething, not just a submerged unidentified quality or one. Sense is also different from signification. The atter involves use of a quality as a sign or index of some-hing else, as when the red of a light signifies danger. nd the need of bringing a moving locomotive to a stop. The sense of a thing, on the other hand, is an immediate nd immanent meaning; it is meaning which is itself elt or directly had. When we are baffled by perplexing onditions, and finally hit upon a clew, and everything alls into place, the whole thing suddenly, as we say, 'makes sense." In such a situation, the clew has signifi-ation in virtue of being an indication, a guide to inter-retation. But the meaning of the *whole* situation as pprehended is sense. This idiomatic usage of the word ense is much nearer the empirical facts than is the ordin-ry restriction of the word in psychological literature to a ingle simple recognized quality, like sweet or red: the atter simply designates a case of *minimum* sense, delib-rately limited for purposes of intellectual safety-first. Whenever a situation has this double function of meaning, amely signification and sense, mind, intellect is definitely resent.

The distinction between physical, psycho-physical, and ental is thus one of levels of increasing complexity and timacy of interaction among natural events. The idea at matter, life and mind represent separate kinds of eing is a doctrine that springs, as so many philosophic rors have sprung, from a substantiation of eventual nctions. The fallacy converts consequences of inter-ction of events into causes of the occurrence of these nsequences—a reduplication which is significant as to e *importance* of the functions, but which hopelessly con-

fuses understanding of them. "Matter," or the physical is a character of events when they occur at a certain level of interaction. It is not itself an event or existence; the notion that while "mind" denotes essence, "matter" denotes existence is superstition. It is more than bare essence; for it is a property of a particular field of interacting events. But as it figures in *science* it is as much an essence, as is acceleration, or the square root of minus one; which meanings also express derivative characters of events in interaction. Consequently, while the theory that life, feeling and thought are never independent of physical events may be deemed materialism it may also be considered just the opposite. For it is reasonable to believe that the most adequate definition of the basic traits of natural existence can be had only when its properties are most fully displayed—a condition which is met in the degree of the scope and intimacy of interactions realized.

In any case, genuine objection to metaphysical materialism is neither moral nor esthetic. Historically speaking materialism and mechanistic metaphysics—as distinct from mechanistic science—designate the doctrine that matter is the efficient cause of life and mind, and that "cause" occupies a position superior in reality to that of "effect." Both parts of this statement are contrary to fact. As far as the conception of causation is to be introduced at all not matter but the natural events having matter as character, "cause" life and mind. "Effects," since they mark the release of potentialities, are more adequate indications of the nature of nature than are just "causes." Control of the occurrence of the complex depends upon its analysis into the more elementary; the dependence of

life, sentiency and mind upon "matter" is thus practical or instrumental. Lesser, more external fields of interaction are more manageable than are wider and more intimate ones, and only through managing the former can we direct the occurrence of the latter. Thus it is in virtue of the character of events which is termed matter that psycho-physical and intellectual affairs can be differentially determined. Every discovery of concrete dependence of life and mind upon physical events is therefore an addition to our resources. If life and mind had no mechanism, education, deliberate modification, rectification, prevention and constructive control would be impossible. To damn "matter" because of honorific interest in spirit is but another edition of the old habit of eulogizing ends and disparaging the means on which they depend.

This, then, is the significance of our introductory statement that the "solution" of the problem of mind-body is to be found in a revision of the preliminary assumptions about existence which generate the problem. As we have already noted, fruitful science of nature began when inquirers neglected immediate qualities, the "sense" of events, wet and dry, hot and cold, light and heavy, up and down, in behalf of "primary," namely, signifying, qualities, and when they treated the latter, although called qualities, not as such but as relations. This device made possible a totally different dialectical treatment. Classic science operated in terms of properties already attached to qualitative phenomena of sense and custom. Hence it could only repeat these phenomena in a changed vocabulary;—the vocabulary of sensory forms and forces which were, after all nothing but the already given meanings of

things reduplicated. But the new dialectic was that o mathematical equations and functions. It started fron meanings which ignored obvious characters or meanings o phenomena; hence it could lead to radically new relation ships and generalizations—new in kind, and not merel in detail. No longer was the connection or classifica tion of one color simply with other colors, but with a events involving rhythmic rates of change. Thus event hitherto disjoined were brought together under princi ples of inclusive formulation and prediction. Tempora qualities were stated as spatial velocities; thereby mathe matical functions directly applicable to spatial position directions and distances, made it possible to reduc sequence of events into calculable terms. Neglect o temporal qualities as such centered thought upon *orde* of succession, an order convertible into one of coexistence

All this in effect is equivalent to seizing upon relation of events as the proper objects of knowledge. The su render of immediate qualities, sensory and significant, a objects of science, and as proper forms of classificatio and understanding, left in reality these immediate qual ties just as they were; since they are *had* there is n need to *know* them. But, as we have had frequent occa sion to notice, the traditional view that the object o knowledge is reality *par excellence* led to the conclusio that the proper object of science was pre-eminently meta physically real. Hence immediate qualities, being ex truded from the object of science, were left thereby hang ing loose from the "real" object. Since their *existen* could not be denied, they were gathered together into psychic realm of being, set over against the object o physics. Given this premise, all the problems regardin

ıe relation of mind and matter, the psychic and the odily, necessarily follow. Change the metaphysical preıise; restore, that is to say, immediate qualities to their ghtful position as qualities of inclusive situations, and ıe problems in question cease to be epistemological probems. They become specifiable scientific problems: questons, that is to say, of how such and such an event havıg such and such qualities actually occurs.

Greek science imputed efficacy to qualities like wet and ry, hot and cold, heavy and light and to such qualitave differences in movement as up and down, to and fro, round and around. The world was formulated and xplained on the basis of the causal efficacy of these ualities. The scientific revolution of the seventeenth entury took its departure from a denial of causal status and hence of significance for science) of these and all ther direct qualities. On account, however, of the conersion of this fact about scientific procedure into a enial of the existence of qualities outside of mind and onsciousness, psycho-physical and mental functions ecame inexplicable anomalies, supernatural in the literal ense of the word. The error of Greek science lay not ı assigning qualities to natural existence, but in misconeiving the locus of their efficacy. It attributed to ualities apart from organic action efficiencies which ualities possess only through the medium of an organized ctivity of life and mind. When life and mind are recogized to be characters of the highly complex and extensive nteraction of events, it is possible to give natural existenal status to qualities, without falling into the mistake of reek science. Psycho-physical phenomena and higher ental phenomena may be admitted in their full empiri-

cal reality, without recourse to dualistic breach in histori existential continuity.

When knowing inanimate things, qualities as such ma be safely disregarded. They present themselves as inte sities and vector directions of movement capable of stat ment in mathematical terms. Thus their immedia individuality is got around; it is impertinent for scienc concerned as the latter is with relationships. The mo that can be said about qualities in the inanimate field that they mark the limit of the contact of historical affai being abrupt ends or termini, boundaries of beginnin and closing where a particular interaction ceases. The are like a line of foam marking the impact of waves different directions of movement. They have to b noted and accepted in order to delimit a field of inquir but they do not enter into the inquiry as factors or term

In life and mind they play an active role. The delim tation or individualization they constitute on this lev is not external to events. It is all one with the organiz tion which permeates them, and which in permeatin them, converts prior limitations of intensity and dire tion of energy into actual and intrinsic qualities, or se tient differences. For in feeling a quality exists as qualit and not merely as an abrupt, discrete, unique delimitatio of interaction. Red differs from green for purposes physical science as that which gives specific meaning two sets of numbers applied to vibrations, or to two diffe ent placements of lines in a spectrum. The difference proleptically qualitative; it refers to a unique differen of potentiality in the affairs under consideration. But far as calculation and prediction are concerned these di ferences remain designable by non-qualitative indices

number and form. But in an organic creature sensitive to light, these differences of potentiality may be realized as differences in immediate sentiency. To say that they are *felt*, is to say that they come to independent and intrinsic existence on their own account. The proposition does not mean that feeling has been extraneously superadded to something else, or that a mode of extrinsic cognitive access to a purely physical thing has entered intrusively into a world of physical things. "Feeling" is in general a name for the newly actualized quality acquired by events previously occurring upon a physical level, when these events come into more extensive and delicate relationships of interaction. More specifically, it is a name for the coming to existence of those ultimate differences in affairs which mark them off from one another and give them discreteness; differences which upon the physical plane can be spoken of only in anticipation of subsequent realization, or in terms of different numerical formulae, and different space-time positions and contiguities.

Thus qualities characteristic of sentiency are qualities *of* cosmic events. Only because they are such, is it possible to establish the one to one correspondence which natural science does establish between series of numbers and spatial positions on one hand and the series and spectra of sensory qualities on the other. The notion that the universe is split into two separate and disconnected realms of existence, one psychical and the other physical, and then that these two realms of being, in spite of their total disjunction, specifically and minutely correspond to each other—as a serial order of numbered vibrations corresponds to the immediately felt qualities of vision of the

prismatic spectrum—presents the acme of incredibility The one-to-one agreement is intelligible only as a cor respondence of properties and relations in one and th same world which is first taken upon a narrower and mor external level of interaction, and then upon a more inclu sive and intimate level. When we recall that by takin natural events on these two levels and instituting point t point correspondence (or "parallelism") between them the richer and more complex display of characters i rendered amenable to prediction and deliberate guidance the intelligibility of the procedure becomes concretel sensible.

Thus while modern science is correct in denying direc efficacy and position in the described sequence of events t say, red, or dry; yet Greek science was correct in it underlying naïve assumption that qualities count fo something highly important. Apart from sentiency an life, the career of an event can indeed be fully describe without any reference to its having red as a quality,— though even in this case, since description is an even which happens only through mental events, dependenc upon an overt or actualized quality of red is required i order to delimit the phenomenon of which a mathematica mechanical statement is made. Qualities actually becom specifically effective however, in psycho-physical situa tions. Where animal susceptibility exists, a red or a odor or sound may instigate a determinate mode of action it has selective power in maintenance of a certain pat tern of energy-organization. So striking is this fact tha we might even define the difference between an inanimat body and a vital and psycho-physical one, by saying tha the latter responds to qualities while the former does not

In this response, qualities become productive of results, and hence potentially significant. That is, in achieving effects, they become connected with consequences, and hence capable of meaning, knowable if not known. This explains the fact that while we are forced to ascribe qualities to events on the physical level, we cannot *know* them on this level; they have when assigned strictly to that level no consequences. But through the medium of living things, they generate effects, which, when qualities are used as means to produce them, are consequences. Thus qualities become intelligible, knowable.

In the higher organisms, those with distance-receptors of ear and eye and, in lesser degree, of smelling, qualities further achieve a difference which is the material basis or substratum of a distinction into activities having preparatory and having consummatory status. "Ends" are not necessarily fulfillments or consummations. They may be mere closures, abrupt cessations, as a railway line may by force of external conditions come to an end, although the end does not fulfill antecedent activities. So there are starts, beginnings which are in no sense preparatory, being rather disturbances and interferences. Events of the physical type have such ends and beginnings which mark them off qualitatively and individually. But as such they are not in any true sense possessed of instrumental nor fulfilling character. They neither initiate nor complete. But when these qualities are realized through organic action, giving rise to acts of utilization, of adaptation (response to quality), they are converted into a series, in which some acts are preparatory and others consummatory. An original contact-activity (including intra-organic disturbances or needs) renders

distance receptors open to stimulation; the responses which take place in consequence tend to occur in such a way as to terminate in a further contact-activity in which original need is satisfied.

This series forms the immediate material of thought when social communication and discourse supervene. The beginning not only *is* the initial term in a *series* (as distinct from a *succession*), but it gains the *meaning* of subsequent activity moving toward a consequence of which it is the first member. The concluding term conserves within itself the meaning of the entire preparatory process. Thereby the original status of contact and distance activities is reversed. When activity is directed by distant things, contact activities must be inhibited or held in. They become instrumental; they function only as far as is needed to direct the distance-conditioned activities. The result is nothing less than revolutionary. Organic activity is liberated from subjection to what is closest at hand in space and time. Man is led or drawn rather than pushed. The immediate is significant in respect to what has occurred and will occur; the organic basis of memory and expectation is supplied. The subordination of contact-activity to distance-activity is equivalent to possibility of release from submergence in the merely given, namely, to abstraction, generalization, inference. It institutes both a difference and a connection between matters that prepare the way for other events and the affairs finally appropriated; it furnishes the material for the relation of thing signifying and thing signified—a relation that is actualized when discourse occurs. When this juncture of events is reached, there comes about the distinction mentioned between sense and signification

The latter denotes the possibility of a later fulfilling sense of things in immediate appropriations and enjoyments. But meanwhile there is a sentience that has to be transformed by subordination to the distance-conditioned activity; which till it is thus transformed is vacant, confused, demanding but lacking meaning. Meanwhile also the distance-conditioned activities acquire as an integral part of their own quality the consequences of their prior fulfilments. They have *significance* with respect to their consequences; but they have perspicuous and coherent *sense* of their own. Thus they become final, and the qualities of contact-activity instrumental. In short, hearing and vision are notoriously the intellectual *and* esthetic senses—an undeniable fact which throws much light on the doctrine of those theorists about value who attempt to divide thought and enjoyable liking from each other in their definitions of value, and who also—quite logically on this premise—sharply separate values into contributory and intrinsic.

The foregoing discussion is both too technical and not elaborately technical enough for adequate comprehension. It may be conceived as an attempt to contribute to what has come to be called an "emergent" theory of mind. But every word that we can use, organism, feeling, psychophysical, sensation and sense, "emergence" itself, is infected by the associations of old theories, whose import is opposite to that here stated. We may, however attempt a recapitulation by premising that while there is no isolated occurrence in nature, yet interaction and connection are not wholesale and homogenous. Interacting-events have tighter and looser ties, which qualify them with certain beginnings and endings, and which mark

them off from other fields of interaction. Such relatively closed fields come into conjunction at times so as to interact with each other, and a critical alteration is effected. A new larger field is formed, in which new energies are released, and to which new qualities appertain. Regulation, conscious direction and science imply ability to smooth over the rough junctures, and to form by translation and substitution a homogenous medium. Yet these functions do not abrogate or deny qualitative differences and unlike fields or ranges of operation, from atoms to solar systems. They do just what they are meant to do: give facility and security in utilizing the simpler manageable field to predict and modify the course of the more complete and highly organized.

In general, three plateaus of such fields may be discriminated. The first, the scene of narrower and more external interactions, while qualitatively diversified in itself, is physical; its distinctive properties are those of the mathematical-mechanical system discovered by physics and which define matter as a general character. The second level is that of life. Qualitative differences, like those of plant and animal, lower and higher animal forms, are here even more conspicuous; but in spite of their variety they have qualities in common which define the psycho-physical. The third plateau is that of association, communication, participation. This is still further internally diversified, consisting of individualities. It is marked throughout its diversities, however, by common properties, which define mind as intellect; possession of and response to meanings.

Each of one of these levels having its own characteristic empirical traits has its own categories. They are

however categories of description, conceptions required to state the fact in question. They are not "explanatory" categories, as explanation is sometimes understood; they do not designate, that is, the operation of forces as "causes." They stick to empirical facts noting and denoting characteristic qualities and consequences peculiar to various levels of interaction. Viewed from this standpoint, the traditional "mechanical" and "teleological" theories both suffer from a common fallacy, which may be suggested by saying that they both purport to be explanatory in the old, non-historical sense of causality. One theory makes matter account for the existence of mind; the other regards happenings that precede the appearance of mind as preparations made for the sake of mind in a sense of preparation that is alleged to explain the occurrence of these antecedents.

Mechanistic metaphysics calls attention to the fact that the latter occurrence could not have taken place without the earlier; that given the earlier, the latter was bound to follow. Spiritualistic metaphysics calls attention to the fact that the earlier, material affairs, prepare the way for vital and ideal affairs, lead up to them; promote them. Both statements are equally true descriptively; neither statement is true in the explanatory and metaphysical meaning imputed to it.

The notion of causal explanation involved in both conceptions implies a breach in the continuity of historic process; the gulf created has then to be bridged by an emission or transfer of force. If one starts with the assumption that mind and matter are two separate things, while the evidence forces one to see that they are connected, one has no option save to attribute the power to

make the connection, to carry from one to the other, to one or the other of the two things involved. The one selected is then "cause;" it accounts for the existence of the other. One person is struck by such affairs as that when a match is struck and paper is near-by the paper catches fire, whether any one wished or intended it to do so or not. He is struck by a compulsory power exercised by the earlier over the later; given the lighted match and contiguous paper and the latter *must* burst into flame. Another person is struck by the fact that matches and paper exist only because somebody has use for them; that the intent and purpose of use preceded the coming into being of match and paper. So he concludes that thought, purpose, starts an emission and transfer of force which brought things into existence in order to accomplish the object of thought. Or, if a little less devoted to human analogies, one notes the cunning continuity of nature, how neatly one thing leads up to another, and how elegantly the later registers and takes advantage of what has gone before, and, beholding that the later is the more complex and the more significant, decides that what goes before occurs for the sake of the later, in its behalf, on its account. The eventual has somehow been there from the start, "implicitly," "potentially," but efficaciously enough to attend to its own realization by using material conditions at every stage.

The gratuitous nature of both assumptions is seen if we set out with any acknowledged historic process,—say—the growth from infancy to maturity, or the development of a melodic theme. There are those who regard childhood as merely getting ready for the supreme dignity of adulthood, and there are those who seem quite sure that adult

life is merely an unrolling by way of mechanical effects of the "causal" forces found in childhood. One of the theories makes youth a preliminary and intrinsically insignificant journey toward a goal; the other makes adulthood a projection, on a supernumerary screen, of a plate and pattern previously inserted in the projecting apparatus of childhood or of prenatal condition, or of heredity, or wherever the fixed and separated antecedent be located. Nevertheless the notion of growth makes it easy, I think, to detect the fallacy residing in both views: namely, the breaking up of a continuity of historical change into two separate parts, together with the necessity which follows from the breaking-in-two for some device by which to bring them together again.

The reality *is* the growth-process itself; childhood and adulthood are phases of a continuity, in which just because it is a history, the later cannot exist until the earlier exists ("mechanistic materialism" in germ); and in which the later makes use of the registered and cumulative outcome of the earlier—or, more strictly, *is* its utilization ("spiritualistic teleology" in germ). The real existence is the history in its entirety, the history as just what it is. The operations of splitting it up into two parts and then having to unite them again by appeal to causative power are equally arbitrary and gratuitous. Childhood is the childhood *of* and *in* a certain serial process of changes which is just what it is, and so is maturity. To give the traits of either phase a kind of independent existence, and then to use the form selected to account for or explain the rest of the process is a silly reduplication; reduplication, because we have after all only parts of one and the same original history; silly because we fancy that we have

accounted for the history on the basis of an arbitrary selection of part of itself.

Substitute for such growth a more extensive history of nature and call it the evolution of mind from matter, and the conclusion is not different. In the old dispute as to whether a stag runs because he has long and slender legs, or has the legs in order that he may run, both parties overlook the natural descriptive statement; namely, that it is of the nature of what goes on in the world that the stag has long legs and that having them he runs. When mind is said to be implicit, involved, latent, or potential in matter, and subsequent change is asserted to be an affair of making it explicit, evolved, manifest, actual, what happens is that a natural history is first cut arbitrarily and unconsciously in two, and then the severance, is consciously and arbitrarily cancelled. It is simpler not to start by engaging in such manoeuvers.

The discussion gives an understanding of the adaptation of nature and life and mind to one another. A mystery has not seldom been made of the fact that objective nature lends itself to man's sense of fitness, order and beauty; or, in another region of discourse, that objective nature submits to mental operations sufficiently to be known. Or, the mystery is conceived from the other end: it seems wonderful that man should be possessed of a sense of order, beauty and rightness; that he should have a capacity of thinking and knowing, so that man is elevated far above nature and seated with angels. But the wonder and mystery do not seem to be other than the wonder and mystery that there should be such a thing as nature, as existential events, at all, and that in being they should be what they are. The wonder should be transferred to the whole

course of things. Only because an arbitrary breach has previously been introduced by which the world, is first conceived as something quite different from what it demonstrably is, does it then appear passing strange that after all it should be just what it is. The world is subject-matter for knowledge, because mind has developed *in* that world; a body-mind, whose structures have developed according to the structures of the world in which it exists, will naturally find some of its structures to be concordant and congenial with nature, and some phases of nature with itself. The latter are beautiful and fit, and others ugly and unfit. Since mind cannot evolve except where there is an organized process in which the fulfillments of the past are conserved and employed, it is not surprising that mind when it evolves should be mindful of the past and future, and that it should use the structures which are biological adaptations of organism and environment as its own and its only organs. In ultimate analysis the mystery that mind should use a body, or that a body should have a mind, is like the mystery that a man cultivating plants should use the soil; or that the soil which grows plants at all should grow those adapted to its own physico-chemical properties and relations.

The account which has been given will be repeated from a more analytic point of view, starting with evident empirical consideration. Every "mind" that we are empirically acquainted with is found in connection with some organized body. Every such body exists in a natural medium to which it sustains some adaptive connection: plants to air, water, sun, and animals to these things and also to plants. Without such connections, animals die; the "purest" mind would not continue with-

out them. An animal can live only as long as it draws nutriment from its medium, finds there means of defence, and ejects into it waste and superfluous products of its own making. Since no particular organism lasts forever, life in general goes on only as an organism reproduces itself; and the only place where it can reproduce itself is in the environment. In all higher forms reproduction is sexual; that is, it involves the meeting of two forms. The medium is thus one which contains similar and conjunctive forms. At every point and stage, accordingly, a living organism and its life processes involve a world or nature temporally and spatially "external" to itself but "internal" to its functions.

The only excuse for reciting such commonplaces is that traditional theories have separated life from nature, mind from organic life, and thereby created mysteries. Restore the connection, and the problem of how a mind can know an external world or even know that there is such a thing, is like the problem of how an animal eats things external to itself; it is the kind of problem that arises only if one assumes that a hibernating bear living off its own stored substance defines the normal procedure, ignoring moreover the question where the bear got its stored material. The problem of how one person knows the existence of other persons, is, when the relation of mind and life is genuinely perceived, like the problem of how one animal can associate with other animals, since other is other. A creature generated in a conjunctive union, dependent upon others (as are at least all higher forms) for perpetuation of its being, and carrying in its own structure the organs and marks of its intimate connection with others will know other creatures if it knows itself.

Since both the inanimate and the human environment are involved in the functions of life, it is inevitable, if these functions evolve to the point of thinking and if thinking is naturally serial with biological functions, that it will have as the material of thought, even of its erratic imaginings, the events and connections of this environment. And if the animal succeeds in putting to use any of its thinkings as means of sustaining its functions, those thoughts will have the characters that define knowledge.

In contrast with lower organisms, the more complex forms have distance receptors and a structure in which activators and effectors are allied to distance even more extensively than to contact receptors. What is done in response to things nearby is so tied to what is done in response to what is far away, that a higher organism acts with reference to a spread-out environment as a single situation. We find also in all these higher organisms that what is done is conditioned by consequences of prior activities; we find the fact of learning or habit-formation. In consequence, an organism acts with reference to a time-spread, a serial order of events, as a unit, just as it does in reference to a unified spatial variety. Thus an environment both extensive and enduring is immediately implicated in present behavior. Operatively speaking, the remote and the past are "in" behavior making it what it is. The action called "organic" is not just that of internal structures; it is an integration of organic-environmental connections. It may be a mystery that there should be thinking but it is no mystery that if there is thinking it should contain in a "present" phase, affairs remote in space and in time, even to geologic ages, future eclipses and far away stellar systems. It is only a question of how far

what is "in" its actual experience is extricated an becomes focal.

It is also an obvious empirical fact that animals ar connected with each other in inclusive schemes of behav ior by means of signaling acts, in consequence of whic certain acts and consequences are deferred until a join action made possible by the signaling occurs. In th human being, this function becomes language, commun cation, discourse, in virtue of which the consequences o the experience of one form of life are integrated in th behavior of others. With the development of recorde speech, the possibilities of this integration are indefinitel widened—in principle the cycle of objective integratio within the behavior of a particular organism is com pleted. Not merely its own distant world of space-tim is involved in its conduct but the world of its fellows. Whe consequences which are unexperienced and future to on agent are experienced and past to another creature wit which it is in communication, organic prudence become conscious expectation, and future affairs living presen realities. Human learning and habit-forming presen thereby an integration of organic-environmental connec tions so vastly superior to those of animals withou language that its experience appears to be super-organi

Another empirical fact follows. Strict repetition an recurrence decrease relatively to the novel. Apart fro communication, habit-forming wears grooves; behavior confined to channels established by prior behavior. In s far the tendency is toward monotonous regularity. Th very operation of learning sets a limit to itself, and make subsequent learning more difficult. But this holds only o *a* habit, a habit in isolation, a non-communicating habi

Communication not only increases the number and variety of habits, but tends to link them subtly together, and eventually to subject habit-forming in a particular case to the habit of recognizing that new modes of association will exact a new use of it. Thus habit is formed in view of possible future changes and does not harden so readily. As soon as a child secretes from others the manifestation of a habit there is proof that he is practically aware that he forms *a* habit subject to the requirements of others as to his further habit formations.

Now an animal given to forming habits, is one with an increasing number of needs, and of new relationships with the world about it. Each habit demands appropriate conditions for its exercise and when habits are numerous and complex, as with the human organism, to find these conditions involves search and experimentation; the organism is compelled to make variations, and exposed to error and disappointment. By a seeming paradox, increased power of forming habits means increased susceptibility, sensitiveness, responsiveness. Thus even if we think of habits as so many grooves, the power to acquire many and varied grooves denotes high sensitivity, explosiveness. Thereby an old habit, a fixed groove if one wishes to exaggerate, gets in the way of the process of forming a new habit while the tendency to form a new one cuts across some old habit. Hence instability, novelty, emergence of unexpected and unpredictable combinations. The more an organism learns–the more that is, the former terms of a historic process are retained and integrated in this present phase–the more it has to learn, in order to keep itself going; otherwise death and catastrophe. If mind is a further process in life, a further

process of registration, conservation and use of what is conserved, then it must have the traits it does empirically have: being a moving stream, a constant change which nevertheless has axis and direction, linkages, associations as well as initiations, hesitations and conclusions.

The thing essential to bear in mind is that living as an empirical affair is not something which goes on below the skin-surface of an organism: it is always an inclusive affair involving connection, interaction of what is within the organic body and what lies outside in space and time, and with higher organisms far outside. For this reason, organic acts are a kind of fore-action of mind; they look as if they were deliberate and consciously intelligent, because of necessity, intelligent action in utilizing the mechanisms they supply, reproduces their patterns. The evidence usually adduced in support of the proposition that lower animals, animals without language, think, turns out, when examined, to be evidence that when men, organisms with power of social discourse, think, they do so with the organs of adaptation used by lower animals, and thus largely repeat in imagination schemes of overt animal action. But to argue from this fact to the conclusion that animals think is like concluding that because every tool, say a plow, originated from some pre-existing natural production, say a crooked root or forked branch, the latter was inherently and antecedently engaged in plowing. The connection is there, but it is the other way around.

Excuse for dwelling upon the fact that life goes on between and among things of which the organism is but one is because this fact is so much ignored and virtually denied by traditional theories. Consider for example, the definitions of life and mind given by Herbert Spencer:

correspondence of an inner order with an outer order. It implies there is an inner order and an outer order, and that the correspondence consists in the fact that the terms in one order are related to one another as the terms or members of the other order are connected within themselves. The correspondence is like that of various phonographic records to one another; But the genuine correspondence of life and mind with nature is like the correspondence of two persons who "correspond" in order to learn each one of the acts, ideas and intents of the other one, in such ways as to modify one's own intents, ideas and acts, and to substitute partaking in a common and inclusive situation for separate and independent performances. If the organism merely repeats in the series of its own self-enclosed acts the order already given without, death speedily closes its career. Fire for instance consumes tissue; that is the sequence in the external order. Being burned to death is the order of "inner" events which corresponds with this "outer" order. What the organism actually does is to act so as to change its relationship to the environment; and as organisms get more complex and human this change of relationship involves more extensive and more enduring changes in the environmental order. The aim is not to protract a line of organic events parallel to external events, but to form a new scheme of affairs to which both organic and environmental relations contribute, and in which they both partake. Yet all schemes of psycho-physical parallelism, traditional theories of truth as correspondence, etc., are really elaborations of the same sort of assumptions as those made by Spencer: assumptions which first make a division where none exists, and then resort to an artifice to restore the connection which has been willfully destroyed.

If organic life denotes a phase of history in which natural affairs have reached a point in which characteristic new properties appear, and new ways of acting are released because of integration of fields hitherto unlinked, there does not seem to be anything extraordinary in the fact that what is known about the earlier "physical" series is applied to interpret and direct vital phenomena; nor in the fact that this application does not exhaust their character nor suffice wholly for their description. We cannot direct a course of interactions without counting and measuring, but the interactions are more than numbers, spaces and velocities. To explain is to employ one thing to elucidate, clear, shed light upon, put in better order, because in a wider context, another thing. It is thus subordinate to more adequate discourse, which, applied to space-time affairs, assumes the style of narration and description. Speaking in terms of captions familiar in rhetoric, exposition and argument are always subordinate to a descriptive narration, and exist for the sake of making the latter clearer, more coherent and more significant.

Body-mind designates an affair with its own properties. A large part of the difficulty in its discussion—perhaps the whole of the difficulty in general apart from detailed questions—is due to vocabulary. Our language is so permeated with consequences of theories which have divided the body and mind from each other, making separate existential realms out of them, that we lack words to designate the actual existential fact. The circumlocutions we are compelled to resort to—exemplified in the previous discussion—thus induce us to think that analogous separations exist in nature, which can also only be got

around by elaborate circuitous arrangements. But body-mind simply designates what actually takes place when a living body is implicated in situations of discourse, communication and participation. In the hyphenated phrase body-mind, "body" designates the continued and conserved, the registered and cumulative operation of factors continuous with the rest of nature, inanimate as well as animate; while "mind" designates the characters and consequences which are differential, indicative of features which emerge when "body" is engaged in a wider, more complex and interdependent situation.

Just as when men start to talk they must use sounds and gestures antecedent to speech, and as when they begin to hunt animals, catch fish or make baskets, they must employ materials and processes that exist antecedently to these operations, so when men begin to observe and think they must use the nervous system and other organic structures which existed independently and antecedently. That the use reshapes the prior materials so as to adapt them more efficiently and freely to the uses to which they are put, is not a problem to be solved: it is an expression of the common fact that anything changes according to the interacting field it enters. Sounds do not cease to be sounds when they become articulate speech; but they do take on new distinctions and arrangements, just as do materials used in tools and machines, without ceasing to be the materials they formerly were. Thus the external or environmental affairs, primarily implicated in living processes and later implicated in discourse, undergo modifications in acquiring meanings and becoming objects of mind, and yet are as "physical" as ever they were.

Unless vital organizations were organizations *of* antecedent natural events, the living creature would have no natural connections; it would not be pertinent to its environment nor its environment relevant to it; the latter would not be usable, material of nutrition and defence. In similar fashion, unless "mind" was, in its existential occurrence, an organization *of* physiological or vital affairs and unless its functions developed out of the patterns of organic behavior, it would have no pertinency to nature, and nature would not be the appropriate scene of its inventions and plans, nor the subject-matter of its knowledge. If we suppose, per impossible or by a miracle, that a separate mind is inserted abruptly in nature, its operation would be wholly dialectical, and in a sense of dialectic which is non-existential not only for the time being, but forever; that is dialectic would be without any *possible* reference to existence. We are so used by tradition both to separating mind from the world and noting that its acts and consequences are relevant to the world-error—aberration and insanity can exist only with respect to relevancy—that we find it easier to make a problem out of the conjunction of two inconsistent premises than to rethink our premises.

Of pure dialectic it is a truism that it is neither materially true nor false, but only self-consistent or else self-contradictory. Were it not for the distorting influence of material bias, of preference that *existence* be thus and so rather than otherwise, and of desire that other creatures should believe as we do or should accept our conclusions, dialectic and calculation would however not be subject even to inconsistency. Some purely logical operations are better than others, even as purely logical, for

hey have greater scope and fertility, but none are truer
r more correct than others. Purely formal errors are
mpossible, so-called formal fallacies to the contrary not-
vithstanding. No one ever actually reasoned that since
iorses are quadrupeds and cows are quadrupeds, horses
re cows. If in some cases, it is made to appear that
ormal reasoning falls into such fallacies, the reason is
hat material causes are brought in and their operation
s overlooked. Dialectical relations are dialectical, not
xistential and therefore have no causative power; there
s nothing in them to generate misconception. The
rinciple of dialectic is identity; its opposite is not incon-
istency to say nothing of falsity; it is nonsense. To
ay that dialectic as such is infallible is only to say it is
ruistic.

Nevertheless logic or the *use* of meanings in a dialectic
nanner *is* actually exposed to all sorts of mistakes. For
very instance of dialectic is itself existential. Meanings
re taken; they are employed for a purpose, just as other
naterials are; they are combined and disjoined. It is the
ct of *taking* which enables dialectic to exist or occur, and
aking is fallible, it is often mis-taking. Using meanings
s a particular act; into this act enter causative factors,
hysiological, social, moral. The most perfect structure
nay be employed for purposes to which it is not apt;
rongly employed for the right purpose, it will buckle
r default. Thus in dialectic, reasoning may flag because
f fatigue; it may take one meaning for another because of
erverse sensory appreciations, due to organic maladjust-
nents; haste, due to absence of inhibition, may lead one to
ake a meaning to be clear when it is cloudy or ambiguous
ith respect to the purpose for which it is used, although

in itself it is neither clear nor obscure; a desire to show of or to confute an opponent may lead to inconsistency and extraneous irrelevancies. Thousands of things may cause fallacies, when meanings truistically infallible because just what they are, are *used* to reach an end or make a conclusion. Self-contradiction assuredly occurs but it is material and active, not formal and non-existential. We contradict ourselves precisely as we contradict another person and for much the same reasons.

The ownership of meanings or mind thus vests in nature; meanings are meanings *of*. The existence of error is proof, not disproof, of the fact that all meanings intrinsically have reference to natural events. The idealist who employs the existence of error and of detection and possible correction of error as evidence of the existence of a pre-existent truth in which errors are contained in their total relationship, and hence are not errors but constituents of truth, are right in the insistence that error involves objective reference. But in the same way digestion involves food-stuffs; and yet does not prove that there pre-exists a model digestion in which food is perfectly assimilated. Error involves a possibility of detection and corrections because it refers to things, but the possibility has an eventual, not a backward reference. It denotes the possibility of acts yet to be undertaken. Like the criterion of perfect efficiency in respect to machines, the notion of a complete judgment in which errors exist only as a rectified constituent of a perfect truth, is part of the art of examination and invention. Action and reaction are equal, to a hundred per cent of equality; but this formal "law" does not guarantee that in any particular system of action—reaction there is contained perfect efficiency

Similarly the objective reference of meanings is complete; it is a hundred per cent affair; but it takes errors as well as truth to make up the hundred per cent, as it takes waste as well as efficiency to make up the perfect equality of action and reaction.

We mark off certain uses of meanings as reveries in order to control better the cognitive reference of other meanings. So we mark off certain meanings as purely rational or ideal, as dialectical or non-existential, in order to control better an eventual existential reference. Meaning may *become* purely esthetic; it may be appropriated and enjoyed for it is in the having. But this also involves control; it is *such* a way of taking and using them as to suspend cognitive reference.[1] This suspension is an acquired art. It required long discipline to recognize poetry instead of taking it as history, instruction and prediction. The idea that meanings are originally floating and esthetic and become intellectual, or practical and cognitive, by a conjunction of happy accidents, puts the cart before the horse. Its element of truth is that there is genuine distinction between having a meaning and using it; the element of falsity is in supposing that meanings, ideas, are first had and afterwards used. It required long experience to

[1] This statement does not rest upon a confusion between objects as causal conditions of meanings and objects as cognitively meant. The distinction is a genuine one, not to be slighted. The former connection is antecedent, the latter is subsequential. But meanings or mind have both kinds of connection. Greek myths for example were adequately conditioned in existence; but they also have a diagnostic status. When not taken as meanings of the behavior of gods, they are taken as meanings of Greek life, just as a hallucinatory ghost when not taken as a spiritual apparition is taken as meaning another event, say, a nervous shock. *Having* a meaning is not a reference, but every meaning had is taken or used as well as had. "Dialectic" means to take it a certain way.

enforce recognition of the distinction; for originally any meaning had, is had in and for use. To hold an idea contemplatively and esthetically is a late achievement in civilization.

Organic and psycho-physical activities with their qualities are conditions which have to come into existence before mind, the presence and operation of meanings ideas, is possible. They supply mind with its footing and connection in nature; they provide meanings with their existential stuff. But meanings, ideas, are also, when they occur, characters of a new interaction of events; they are characters which in their incorporation with sentiency transform organic action, furnishing it with new properties. Every thought and meaning has its substratum in some organic act of absorption or elimination of seeking, or turning away from, of destroying or caring for, of signaling or responding. It roots in some definite act of biological behavior; our physical names for mental acts like seeing, grasping, searching, affirming, acquiescing, spurning, comprehending, affection, emotion are not just "metaphors." But while a burnt child may shrink from flame just as the dog cowers at the sight of a stick, a child may in addition, when the conditions involved have become a matter of discourse and are ideas, respond to the burn-giving flame in playful, inventive, curious and investigative ways. He pokes a stick or piece of paper into it; he uses flame and the fact of its painful and burning consequence not just to keep away from it, but to do things with it in ways which will satisfy his want to have to do with fire but without getting burned. Biological acts persist, but have sense, meaning, as well as feeling, tone. Abrupt withdrawal having only negative, protective con-

sequences is turned into significant and fruitful explora-
tion and manipulation. Man combines meanings, like
fire, nearness, remoteness, warmth, comfort, nice, pain,
expansion, softening, so that fire enters into new inter-
actions and effects new consequences. By an intra-or-
ganic re-enactment of partial animal reactions to natural
events, and of accompanying reactions to and from others
acquired in intercourse and communication, means-
consequences are tried out in advance without the organ-
ism getting irretrievably involved in physical conse-
quences. Thought, deliberation, objectively directed
imagination, in other words, is an added efficacious function
of natural events and hence brings into being new conse-
quences. For images are not made of psychical stuff;
they are qualities of *partial* organic behaviors, which are
their "stuff." They are partial because not fully geared
to extero-ceptor and muscular activities, and hence not
complete and overt.

Domination by spatial considerations leads some
thinkers to ask *where* mind is. Reserving the discussion of
conscious behavior for the next chapter, and accepting
for the moment the standpoint of the questioner (which
ignores the locus of discourse, institutions and social arts),
limiting the question to the organic individual, we may say
that the "seat" or locus of mind—its static phase—is the
qualities of organic action, as far as these qualities have
been conditioned by language and its consequences. It
is usual for those who are posed by the question of "where"
and who are reluctant to answer that mind is "where"
there is a spaceless separate realm of existence, to fall
back in general on the nervous system, and specifically
upon the brain or its cortex as the "seat" of mind. But

the organism is not just a structure; it is a characteristi way of interactivity which is not simultaneous, all a once but serial. It is a way impossible without structure for its mechanism, but it differs from structure as walkin differs from legs or breathing from lungs. Prior to com munication, the qualities of this action are what we hav termed psycho-physical; they are not "mental." Th consequences of partaking in communication modif organic ways of acting; the latter attain new qualities.

When I think such meanings as "friend" and "enemy, I refer to external and eventual consequences. But thi naming does not involve miraculous "action at a dis tance." There is something present in organic actio which acts as a surrogate for the remote things signified The words make immediate sense as well as have signif cation. This something now present is not just the activ ity of the laryngeal and vocal apparatus. When shortci cuiting through language is carried as far as limitation t this apparatus, words are mere counters automaticall used, and language disappears. The ideas are qualities o events in all the parts of organic structure which have eve been implicated in actual situations of concern with extra organic friends and enemies:—presumably in propri receptors and organ-receptors with *all* their connecte glandular and muscular mechanisms. These qualitie give body and stuff to the activity of the linguistic appara tus. The integration of the qualities of vocal apparatu allied through the nervous mechanism with the qualitie of these other events, constitutes the immediate sense o friendliness and animosity. The more intimate th alliance of vocal activity with the total organic dispos tion toward friends and enemies, the greater is the imme

diate sense of the words. The nervous system is in no sense the "seat" of the idea. It is the mechanism of the connection or integration of acts.

"Socrates is mortal" is hardly more than a counter of logical text-books; S is M will do just as well—or better. But not so to the disciples of Socrates who had just heard of his condemnation to death. The connection of the auditory act with the totality of organic responses was then complete. In some linguistic situations, such emphatic immediate presence of sense occurs; language is then poetical. For other purposes, action is served by elimination of immediate sense as far as possible. The attitude is prosaic; it is best subserved by mathematical symbolism; mathematical not signifying something ready made, but being simply the devices by which mind is rigidly occupied with instrumental objects, by means of artificial inhibition of immediate and consummatory qualities, the latter being distracting for the activity in hand. The consummatory phase cannot be suppressed or eliminated however; nature pitched through the door returns through the window. And the common form of its return today is falling down in worship or in fear before the resulting mathematico-mechanical object.

In conclusion, it may be asserted that "soul" when freed from all traces of traditional materialistic animism denotes the qualities of psycho-physical activities as far as these are organized into unity. Some bodies have souls preeminently as some conspicuously have fragrance, color, and solidity. To make this statement is to call attention to properties that characterize these bodies, not to import a mysterious non-natural entity or force. Were there not in actual existence properties of sensitivity and of marvel-

ously comprehensive and delicate participative response characterizing living bodies, mythical notions about the nature of the soul would never have risen. The myths have lost whatever poetic quality they once had; when offered as science they are superstitious encumbrances. But the idiomatic non-doctrinal use of the word soul retains a sense of the realities concerned. To say emphatically of a particular person that he has soul or a great soul is not to utter a platitude, applicable equally to all human beings. It expresses the conviction that the man or woman in question has in marked degree qualities of sensitive, rich and coordinated participation in all the situations of life. Thus works of art, music, poetry, painting, architecture, have soul, while others are dead, mechanical.

When the organization called soul is free, moving and operative, initial as well as terminal, it is spirit. Qualities are both static, substantial, and transitive. Spirit quickens; it is not only alive, but spirit gives life. Animals are spirited, but man is a living spirit. He lives in his works and his works do follow him. Soul is form, spirit informs. It is the moving function of that of which soul is the substance. Perhaps the words soul and spirit are so heavily laden with traditional mythology and sophisticated doctrine that they must be surrendered; it may be impossible to recover for them in science and philosophy the realities designated in idiomatic speech. But the realities are there, by whatever names they be called.

Old ideas do not die when the beliefs which have been explicitly associated with them disappear; they usually only change their clothes. Present notions about the organism are largely a survival, with changed vocabulary,

of old ideas about soul and body. The soul was conceived as inhabiting the body in an external way. Now the nervous system is conceived as a substitute, mysteriously within the body. But as the soul was "simple" and therefore not diffused through the body, so the nervous system as the seat of mental events is narrowed down to the brain, and then to the cortex of the brain; while many physiological inquirers would doubtless feel enormously relieved if a specific portion of the cortex could be ascertained to be *the* seat of consciousness. Those who talk most of the organism, physiologists and psychologists, are often just those who display least sense of the intimate, delicate and subtle interdependence of all organic structures and processes with one another. The world seems mad in pre-occupation with what is specific, particular, disconnected in medicine, politics, science, industry, education. In terms of a conscious control of inclusive wholes, search for those links which occupy key positions and which effect critical connections is indispensable. But recovery of sanity depends upon seeing and using these specifiable things *as* links functionally significant in a process. To see the organism *in* nature, the nervous system in the organism, the brain in the nervous system, the cortex in the brain is the answer to the problems which haunt philosophy. And when thus seen they will be seen to be *in*, not as marbles are in a box but as events are in history, in a moving, growing never finished process. Until we have a procedure in actual practice which demonstrates this continuity, we shall continue to engage in appealing to some other specific thing, some other broken off affair, to restore connectedness and unity—calling the specific religion or reform or whatever specific is the fash-

ionable cure of the period. Thus we increase the disease in the means used to cure it.[2]

In matters predominantly physical we know that all control depends upon conscious perception of relations obtaining between things, otherwise one cannot be used to affect the other. We have been marvellously successful in inventing and constructing external machines because with respect to such things we take for granted that success occurs only upon the conscious plane—that of conscious perception of the relations which things sustain to one another. We know that locomotives and aeroplanes and telephones and power-plants do not arise from instinct or the subconscious but from deliberately ascertained perception of connections and orders of connections. Now after a period in which advance in these respects was complacently treated as proof and measure of progress, we have been forced to adopt pessimistic attitudes, and to wonder if this "progress" is to end in the deterioration of man and the possible destruction of civilization.

Clearly we have not carried the plane of conscious control, the direction of action by perception of connections, far enough. We cannot separate organic life and mind from physical nature without also separating nature from life and mind. The separation has reached a point where intelligent persons are asking whether the end is to be catastrophe, the subjection of man to the industrial and military machines he has created. This situation confers peculiar poignancy upon the fact that just where connections and interdependences are most numerous, intimate

[2] See F. Matthias Alexander's Man's Supreme Inheritance, and Conscious Constructive Control.

and pervasive, in living, psycho-physical activity, we most ignore unity and connection, and trust most unreservedly in our deliberate beliefs to the isolated and specific—which signifies that in action we commit ourselves to the unconscious and subconscious, to blind instinct and impulse and routine, disguised and rationalized by all sorts of honorific titles. Thus we are brought to the topic of consciousness.

CHAPTER EIGHT

Existence, Ideas and Consciousness

In the discussions of the last chapter the word "consciousness" was avoided. It is a word of unsettled signification. Even apart from ambiguities in interpretation, there is no consensus as to what things the word denotes. Two quite different affairs are usually designated by it. On the one hand, it is employed to point out certain qualities in their immediate apparency, qualities of things of sentiency, such as are, from the psychological standpoint, usually termed feelings. The sum total of these immediate qualities present as literal ends or closures of natural processes constitute "consciousness" as an anoetic occurrence. This is consciousness wherever meanings do not exist; that is to say, apart from the existence and employment of signs, or independently of communication. On the other hand, consciousness is used to denote meanings actually perceived, *awareness* of objects: being wide-awake, alert, attentive to the significance of events, present, past, future. It is a lexicographic matter, which will not be discussed, whether the word should be employed to denote two such different affairs. What is important is that the difference in the nature of the things denoted should be registered, and that false ingenuity should not be expended in reducing one to the other.

Our previous discussion enables us, it will appear, to place the two denotations. The existential starting point is immediate qualities. Even meanings taken not as meanings but as existential are grounded in immediate

qualities, in sentiencies or "feelings," of organic activities and receptivities. Meanings do not come into being without language, and language implies two selves involved in a conjoint or shared undertaking. Thus while its direct mechanism is found in the vocalizing and auditory apparatuses, this mechanism is in alliance with general organic behavior. Otherwise it becomes a mechanical routine not differing from the "speech" of parrot or a phonographic record. This alliance supplies language with the immediate qualitative "feel" that marks off signs immediately from one another in existence.

The same considerations define the "subconscious" of human thinking. Apart from language, from imputed and inferred meaning, we continually engage in an immense multitude of immediate organic selections, rejections, welcomings, expulsions, appropriations, withdrawals, shrinkings, expansions, elations and dejections, attacks, wardings off, of the most minute, vibratingly delicate nature. We are not aware of the qualities of many or most of these acts; we do not objectively distinguish and identify them. Yet they exist as feeling qualities, and have an enormous directive effect on our behavior. If for example, certain sensory qualities of which we are not cognitively aware cease to exist, we cannot stand or control our posture and movements. In a thoroughly normal organism, these "feelings" have an efficiency of operation which it is impossible for thought to match. Even our most highly intellectualized operations depend upon them as a "fringe" by which to guide our inferential movements. They give us our *sense* of rightness and wrongness, of what to select and emphasize and follow up, and what to drop, slur over and ignore, among the

multitude of inchoate meanings that are presenting themselves. They give us premonitions of approach to acceptable meanings, and warnings of getting off the track. Formulated discourse is mainly but a selected statement of what we wish to retain among all these incipient starts, following ups and breakings off. Except as a reader, a hearer repeats something of these organic movements, and thus "gets" their qualities, he does not get the *sense* of what is said; he does not really assent, even though he give cold approbation. These qualities are the stuff of "intuitions" and in actuality the difference between an "intuitive" and an analytic person is at most a matter of degree, of relative emphasis. The "reasoning" person is one who makes his "intuitions" more articulate, more deliverable in speech, as explicit sequence of initial premises, jointures, and conclusions.

Meanings acquired in connection with the use of tools and of language exercise a profound influence upon organic feelings. In the reckoning of this account, are included the changes effected by all the consequences of attitude and habit due to *all* the consequences of tools and language—in short, civilization. Evil communications corrupt (native) good manners of action, and hence pervert feeling and subconsciousness. The deification of the subconscious is legitimate only for those who never indulge in it—animals and thoroughly healthy naïve children—if there be any such. The subconscious of a civilized adult reflects all the habits he has acquired; that is to say, all the organic modifications he has undergone. And in so far as these involve mal-coordinations, fixations and segregations (as they assuredly come to do in a very short time for those living in complex "artificial" conditions),

ensory appreciation is confused, perverted and falsified. It is most reliable in just those activities with respect to which it is least spoken of, and least reliable with respect to those things where it is fashionable most to laud it. That is, it operates most successfully in meanings associated with language that is highly technical, affairs remote from fundamental and exigent needs, as in mathematics, or philosophizing far away from concrete situations, or in a highly cultivated fine art. It is surest to be wrong in connection with intimate matters of self-regulation in health, morals, social affairs—in matters most closely connected with basic needs and relationships. Where its use is popularly recommended it is most dangerous. To use feelings which are not the expression of a rectitude of organic action, rectitude that in civilized or artificial conditions is acquired only by taking thought, (*taking* thought is radically different to just "thinking"), is to act like an animal without having the structural facilities of animal life. It has the fascination of all easy surrender to fatality and may be eulogized as a return to nature, spontaneity, or to the quasi-divine. It has the charm of lazy and comfortable escape from responsibility; we die, but we die, like animals, upon the field, defeated and mayhap disheartened, but without knowing it.

In a practical sense, here is the heart of the mind-body problem. Activities which develop, appropriate and enjoy meanings bear the same actualizing relation to psycho-physical affairs that the latter bear to physical characters. They present the consequences of a wider range of interactions, that in which needs, efforts and satisfactions conditioned by association are operative. In this widened

and deepened activity, there are both added resource and values, and added liabilities and defaults. Th actualization of meanings furnishes psycho-physical quali ties with their ulterior significance and worth. But i also confuses and perverts them. The effects of this cor ruption are themselves embodied through habits in th psycho-physical, forming one-sided degraded and exces sive susceptibilities; creating both disassociations an rigid fixations in the sensory register. These habitua effects become in turn spontaneous, natural, "instinctive; they form the platform of development and apprehensio of further meanings, affecting every subsequent phase o personal and social life.[1]

Thus while the psycho-physical in man, apart fro conscious meaning achieves nothing distinguished, th casual growth and incorporation of meanings cause th native need, adjustment and satisfaction to lose their im mediate certainty and efficiency, and become subject to al kinds of aberrations. There then occur systematize withdrawals from intercourse and interaction, from wha common sense calls "reality": carefully cultivated an artificially protected fantasies of consolation and com pensation; rigidly stereotyped beliefs not submitted to ob jective tests; habits of learned ignorance or systematize ignorings of concrete relationships; organized fanaticisms dogmatic traditions which socially are harshly intoler ant and which intellectually are institutionalized para noic systems; idealizations which instead of being imme diate enjoyments of meanings, cut man off from natur and his fellows.

[1] See the books of Mr. Alexander already referred to, p. 296.

In short, there is constituted what Walter Lippmann as well termed a secondary pseudo-environment, which ffects every item of traffic and dealing with the primary nvironment. Thus the concrete problems of mind-ody have their locus and import in the educational rocedures by which a normal integration of meanings in rganic functions shall be secured and perversions pre-ented; in the remedial operations of psychiatry, and in ocial arts and appliances that render intercourse substan-al, balanced and flexible.

While on the psycho-physical level, consciousness de-otes the totality of actualized immediate qualitative ifferences, or "feelings," it denotes, upon the plane of ind, actualized apprehensions of meanings, that is, leas. There is thus an obvious difference between ind and consciousness; meaning and an idea. Mind enotes the whole system of meanings as they are em-odied in the workings of organic life; consciousness in a eing with language denotes awareness or perception of eanings; it is the perception of actual events, whether ast, contemporary or future, *in* their meanings, the aving of actual ideas. The greater part of mind is nly implicit in any conscious act or state; the field of ind—of operative meanings—is enormously wider than at of consciousness. Mind is contextual and persistent; nsciousness is focal and transitive. Mind is, so to eak, structural, substantial; a constant background and reground; perceptive consciousness is process, a series heres and nows. Mind is a constant luminosity; nsciousness intermittent, a series of flashes of varying tensities. Consciousness is, as it were, the occasional terception of messages continually transmitted, as a

mechanical receiving device selects a few of the vibr
tions with which the air is filled and renders them audib

The nature of awareness of meanings cannot
conveyed in speech. As with other immediate qua
tative existences, words can only hint, point; t
indication succeeding when it evokes an actual expe
ence of the thing in question. Such words as apparen
conspicuousness, outstandingness, vividness, clearness,
cluding of course their opposites vague, dim, confus
may assist the evocation. To denote the character
tics of mind a thoroughly different set of names must
used: organization, order, coherence. The relation
mind to consciousness may be partially suggested
saying that while mind as a system of meanings is subj
to disorganization, disequilibration, perturbation, there
no sense in referring to a particular state of awareness
its immediacy as either organized or disturbed. An id
is just what it is when it occurs. To call it composed
perturbed is to compare one state with another, a co
parison which by nature of the case can be made or
indirectly on the basis of respective conditions and co
sequences. Emotional conditions do not *occur* as em
tions, intrinsically defined as such; they occur as "tertiar
qualities of objects. Some cases of awareness or perce
tion are designated "emotions" in retrospect or from wit
out, as a child is instructed to term certain percept
situations anger, or fear, or love, by way of informi
him as to their consequences. Immediately, every p
ceptual awareness may be termed indifferently emoti
sensation, thought, desire: not that it *is* immediate
any one of these things, or all of them combined, but th
when it is taken in some *reference*, to conditions or

consequences or to both, it has, in that contextual reference, the distinctive properties of emotion, sensation, thought or desire.

The relation between mind and consciousness may be indicated by a familiar happening. When we read a book, we are immediately conscious of meanings that present themselves, and vanish. These meanings existentially occurring are *ideas*. But we are capable of getting ideas from what is read because of an organized system of meanings of which we are not at any one time completely aware. Our mathematical or political "mind" is the system of such meanings as possess and determine our particular apprehensions or ideas, There is however, a continuum or spectrum between this containing system and the meanings which, being focal and urgent are the ideas of the moment. There is a contextual field between the latter and those meanings which determine the habitual direction of our conscious thoughts and supply the organs for their formation. One great mistake in the orthodox psychological tradition is its exclusive preoccupation with sharp focalization to the neglect of the vague shading off from the foci into a field of increasing dimness.

Discrimination in favor of the clearly distinguished has a certain practical justification, for the vague and extensive background is present in every conscious experience and therefore does not define the character of any one in particular. It represents that which is being used and taken for granted, while the focal phase is that which is imminent and critical. But this fact affords no justification for neglect and denial in theory of the dim and total background consciousness of every distinct thought. If

there were a sharp division between the ideas that ar focal as we read a certain section of a book and what w have already read, if there were not carried along a sens of the latter, what we now read could not take the forn of an idea. Indeed, the use of such words as context an background, fringe, etc., suggests something too externa to meet the facts of the case. The larger system o meaning suffuses, interpenetrates, colors what is nov and here uppermost; it gives them sense, feeling, as dis tinct from signification.

Change the illustration from reading a book to seein and hearing a drama. The emotional as well as intellec tual meaning of each presented phase of a play depend upon the operative presence of a continuum of meanings If we have to remember what has been said and done a any particular point, we are not aware of what is now sai and done; while without its suffusive presence in what i now said and done we lack clew to its meaning. Thu the purport of past affairs is present in the momentary cross-sectional idea in a way which is more intimate, direc and pervasive than the way of recall. It is positively an integrally carried in and by the incidents now happening these incidents are, in the degree of genuine dramati quality, fulfillment of the meanings constituted by pas events; they also give this system of meanings an unex pected turn, and constitute a suspended and still indeter minate meaning, which induces alertness, expectancy It is this double relationship of continuation, promotion carrying forward, and of arrest, deviation, need of supple mentation, which defines that focalization of meaning which is consciousness, awareness, perception. Every case of consciousness is dramatic; drama is an enhance ment of the conditions of consciousness.

It is impossible to tell what immediate consciousness s—not because there is some mystery in or behind it, ut for the same reason that we cannot tell just what weet or red immediately is: it is something had, not ommunicated and known. But words, as means of irecting action, may evoke a situation in which the thing n question is had in some particularly illuminating way. t seems to me that anyone who installs himself in the nidst of the unfolding of drama *has* the experience of onsciousness in just this sort of way; in a way which nables him to give significance to descriptive and analyic terms otherwise meaningless. There must be a story, ome whole, an integrated series of episodes. This conected whole is mind, as it extends beyond a particular rocess of consciousness and conditions it. There must lso be now-occurring events, to which meanings are ssigned in terms of a story taking place. Episodes do ot mean what they would mean if occurring in some ifferent story. They have to be perceived in terms of he story, as its forwardings and fulfillings. At the same ime, until the play or story is ended, meanings given to vents are of a sort which constantly evoke a meaning hich was not absolutely anticipated or totally predicted: here is expectancy, but also surprise, novelty. As far s complete and assured prediction is possible, interest in he play lags; it ceases to be an observed drama, it is not ubsequently in consciousness.

An oft-told tale repeated without change fails to engage erception; it liberates us for attention to another story here development of meanings is as yet incomplete and ndeterminate, possessed of suspense and uncertainty. hus while perceptions are existentially intermittent and

discrete, like a series of signal flashes, or telegraphic click
yet they involve a continuum of *meaning* in process
formation. If we became convinced that a succession
flashes or clicks were not a *series* of terms with respect t
one and the same unfolding meaning, we should not a
tend to them or be aware of them. If on the other hand
there are no variations to compel suspense, no unforsee
movement in a new direction; if there is one unbroke
luminosity, or one unbroken monotony of sound, there
no perception, no consciousness.

These considerations enable us to give a formal defin
tion of consciousness in relation to mind or meaning
Consciousness, an idea, is that phase of a system of mean
ings which at a given time is undergoing re-direction
transitive transformation. The current idealistic co
ception of consciousness as a power which modifies event
is an inverted statement of this fact. To treat consciou
ness as a power accomplishing the change, is but anothe
instance of the common philosophic fallacy of convertin
an eventual function into an antecedent force or caus
Consciousness *is* the meaning of events in course of r
making; its "cause" is only the fact that this is one of th
ways in which nature goes on. In a proximate sense
causality, namely as place in a series history, its caus
tion is the need and demand for filling out what is ind
terminate.

There is a counterpart realist doctrine, according
which consciousness is like the eye running over a fie
of ready-made objects, or a light which illuminates no
this and now that portion of a given field. These anal
gies ignore the indeterminateness of meaning when the
is awareness; they fail to consider a basic consideratio

namely, that while there exists an antecedent stock of meanings, these are just the ones which we take for granted and use: the ones of which we are not and do not need to be conscious. The theory takes as the normal case of consciousness the case where there is a minimum of doubt and inquiry; the case where objects are most familiar and current, and so to speak vouch directly for themselves. It finds consciousness exemplified in being aware of old and often used things (the articles of furniture which figure in most discussions of consciousness) rather than in case of thinking where reflective inquiry is needed in order to arrive at a meaning. It postulates, even though only implicitly, a pre-established harmony of the knower and things known, passing over the fact that such harmony is always an attained outcome of prior inferences and investigations. It assumes a knowing mind wholly guileless, and extraordinarily competent, whose sole business is to behold and register objects just as what they are, and which is unswervingly devoted to its business.

It is hard to believe that such an amiable and optimistic view of the nature of mind could have obtained currency, had it not been for a theology according to which God is perfect mind and man is created in the image of his maker. Even so, however, it could hardly have persisted when science displaced theology, had not science provided a number of cases which satisfy the requirement of the theory, and thereby given it a kind of empirical content and basis. That is, the development of science does present (a) the rise of cognitional interest to a point of prestige, and (b) it supplies eventually many cases of valid cognitive perceptions. Those who concern them-

selves with inquiry into the nature of consciousness hav a strongly developed intellectual interest; this makes i easy for them to postulate a universal concern in know ing objects as the very essence of mind. These person have rectitude of cognitive bent, acquired through scien tific training; and they with ready benevolence, confe similar rectitude upon perception universally. Ther when the existence of error, mistake, dreams, hallucina tions, etc. is recognized, these things are treated as devia tions and exceptions from the normal, to be accounted fo by the introduction of complicating factors.

The problem and its solution thus become essentiall dialectical. For empirical facts indicate that not erro but truth is the exception; the thing to be accounted for and that the attainment of truth is the outcome of th development of complex and elaborate methods of search ing, methods that while congenial to some men in som respects, in many respects go against the human grain so that they are adopted only after long discipline in school of hard knocks. Even to put the matter in term of proportion of erroneous and true perceptions, is to fai to see the chief objection to the theory. For it postu lates the primarily cognitive character of awareness o perception. Empirically, however, the characteristi thing about perceptions in their natural estate, apart fron subjection to an art of knowing, is their irrelevance t both truth and error; they exist for the most part i another dimension, whose nature may be suggested b reference to imagination, fancy, reverie, affection, lov and hate, desire, happiness and misery. This fact, mor than the error-problem, proves the artificial character o the spectator, search-light, notion of consciousness.

Empirical evidence in support of the proposition that consciousness of meanings denotes redirection of meanings (which are always ultimately meanings of events) is supplied by obvious facts of attention and interest on one side, and the working of established and assured habits on the other. The familiar does not consciously appear, save in an unexpected, novel, situation, where the familiar presents itself in a new light and is therefore not wholly familiar. Our deepest-seated habits are precisely those of which we have least awareness. When they operate in a situation to which they are not accustomed, in an unusual situation, a new adjustment is required. Hence there is shock, and an accompanying perception of dissolving and reforming meaning. Attention is most alert and stretched, when, because of unusual situations, there is great concern about the issue, together with suspense as to what it will be. We are engaged at once in taking in what *is* happening and looking ahead to what has not yet happened. As far as we can count upon the contemporary conditions *and* upon their outcome, focalization of meaning is absent. That which is taken to be involved *in any event*, in every issue, *no matter what*, we are not aware of. If we consider the entire field from bright focus through the fore-conscious, the "fringe," to what is dim, sub-conscious "feeling," the focus corresponds to the point of imminent need, of urgency; the "fringe" corresponds to things that just have been reacted to or that will soon require to be looked after, while the remote outlying field corresponds to what does not have to be modified, and which may be dependably counted upon in dealing with imminent need.

Hence the proverbial disparity between things in the scale of consciousness and in the scale of consequences is the most conclusive refutation of subjective idealism. The power of a momentary annoyance or flitting amusement to distract a personage from an enduringly serious question is a familiar theme of comedy; a glass of wine or the whine of a mosquito may exclude issues of life and death. Any trivial thing may swell and swell, if it bothers us. To like effect are the standing complaints of moralists that men sacrifice the great good to the lesser, if the latter be close at hand; and their proclamation that reason and freedom are only found when the near-by and the remote good are weighed with equal balance. Tragedy gives the same testimony. While doom impends the tragic hero fatally pursues his way, unheeding of the web closing in upon him, obvious to all others, and oblivious of what should be done to avert destructive destiny.

The *immediately* precarious, the point of greatest immediate need, defines the apex of consciousness, its intense or focal mode. And this is the point of *re*-direction, of *re*-adaptation, *re*-organization. Hence the aptness of James's comparison of the course of consciousness to a stream, in spite of its intermittent character—a fact empirically recognized in his intimation of its rhythmic waxings and wanings—; of his insistence that only an object, not a concrete consciousness which is had twice, or which remains the same; of his analogy of focus and fringe; of his statement of its movements as a series of perchings and flights, of substantial and transitive phases; for meanings are condensed at the focus of imminent re-direction only to disappear as organization is effected, and yield place to another point of stress and weakness.

Empirical confirmation of this conception of consciousness is found in the extreme instability of every perceived object; the impossibility of excluding rapid and subtle change, except at the cost of inducing hypnotic sleep; the passage from being wide awake, awake, drowsy, dreaming and fast asleep, according as an organism is actively partaking, or abstaining from partaking, in the course of events. All that goes by the name of "relativity" of consciousness is to precisely the same effect, including the Weberian principle; perceived changes are those which require a redirection of adaptive behavior. A prior adaptation constitutes a threshold (better called a platform or plateau); what is consciously noted is alteration of one plateau; re-adjustment to another. Similar events may mean cold at one time or place and warmth at another, depending upon the *direction* of organic re-adaptation. Even a tooth-ache is unstable in consciousness for it is notoriously a matter of throbs, pulsations, palpitations, waxings and wanings of intensity, of organic protests and temporary deviations, and of enforced returns—of flights and perchings. The "tooth-ache" which does not change is not the perceived tooth-ache, but the cognitive *object*, the unperceived tooth to which the sequence of all changes is referred.

Confirmation of the hypothesis is found in the fact that wherever perceptual awareness occurs, there is a "moment" of hesitation; there are scruples, reservations, in complete overt action. It seems quite probable that men of the executive type are those of the least subtle and variegated perceptual field; of the lowest degree of consciousness, having the steepest threshold to be crossed in order to induce a state of awareness. We have to

"stop and think," and we do not stop unless there is interference. The flood of action at high tide overrides all but the most considerable obstructions. It flows too forcibly and rapidly in one direction to be checked; without inhibition there are no hesitations, crises, alternatives, need of re-direction. Overt action is an enstatement of established organic-environmental integrations. As long as these *can* maintain themselves, they do so; there is then no opportunity for transforming meaning into idea. In completely integrated function there is no room for distinction between things signifying and things signified. Only when behavior is divided within itself, do some of its factors have a subject-matter which stands for present tendencies and for their requirements or indications and implications, while others factors stand for absent and remote objects which, in unifying and organizing activity, complete the meaning of what is given at hand. The readier a response, the less consciousness, meaning, thinking it permits; division introduces mental confusion, but also, in need for redirection, opportunity for observation, recollection, anticipation.

There is then an empirical truth in the common opposition between theory and practice, between the contemplative, reflective type and the executive type, the "go-getter," the kind that "gets things done." It is, however, a contrast between two modes of practice. One is the pushing, slam-bang, act-first and think-afterwards mode, to which events may yield as they give way to any strong force. The other mode is wary, observant, sensitive to slight hints and intimations; perhaps intriguing, timid in public and ruthless in concealed action; perhaps over-cautious and inhibited, unduly subject to scruples,

hesitancies, an ineffective Hamlet in performance; or perhaps achieving a balance between immediately urgent demands and remoter consequences, consistent and cumulative in action. In the latter case, there develops a field of perception, rich in hues and subtle in shades of meaning. In the degree in which this occurs, overt action is subordinated to the contribution it renders to sustaining and developing the scope of the conscious field. One lives on a conscious plane; thought guides activity, and perception is its reward. Action is not suppressed but is moderated. Like the scientific experimenter, one acts not just to act, nor rashly, nor automatically, but with a consciousness of purpose and for the sake of learning. Intellectual hesitations and reservations are used to expand and enrich the field of perception, by means of rendering activity more delicate, and discriminatingly adapted.

The notion that highly thoughtful persons are incompetent in action has its proper corrective in another attitude of belief which is expressed in such words as these: "No one can *make* you see this point; but unless you do see it, you won't change your conduct; if you do get the point you will act differently." The first notion, that thought paralyzes, refers to action in gross, the second relates to change in quality of action. Carry to an extreme the experiences indicated by the first proposition, and the result is the so-called automaton or epiphenomenal theory of consciousness; perception is an idle and superficial attachment to a mechanical play of energies. Carry the experiences involved in the other saying to an extreme, and you have the doctrine of the original creativeness of consciousness; it makes objects what they are.

Empirically the situation stands about like this: The use or intent of instruction, advice, admonition, and honest dialectic is to bring to awareness meanings hitherto unperceived, thereby constituting their ideas. The entanglements, misunderstandings and compromised understandings of life are a sufficient commentary on the difficulties in the way of realizing this intent. But experience demonstrates that as far as it is accomplished, conduct is actually changed; to get a new meaning *is* perforce to be in a new attitude. This does not indicate that consciousness or perception is an entity which *makes* the difference. What follows is that perception or consciousness *is*, literally, the difference in process of *making*. Instruction and reproof that are not an idle flogging of the air involve an art of re-directing activity; given this redirection and there is emergence of change in meanings, or perception. There is here no question of priority or causal sequence; intentional change in direction of events *is* transforming change in the *meaning* of those events. We have at present little or next to no controlled art of securing that redirection of behavior which constitutes adequate perception or consciousness. That is, we have little or no art of education in the fundamentals, namely in the management of the organic attitudes which color the qualities of our conscious objects and acts.

As long as our chief psycho-physical coordinations are formed blindly and in the dark during infancy and early childhood, they are accidental adjustments to the pressure of other persons and of circumstances which act upon us. They do not then take into account the consequence of these activities upon formation of habits and habituations. Hence the connection between consciousness and

action is precarious, and its possession a doubtful boon as compared with the efficacy of instinct—or structure—in lower animals. Energy is wasteful and misdirected; in the outcome we effect the opposite of what we intended. Consciousness is desultory and casual. Only when organic activity achieves a conscious plane shall we be adequately aware of what we are about. As long as our own fundamental psycho-physical attitudes in dealing with external things are subconscious, our conscious attention going only to the relations of external things, so long will our perception of the external situations be subject at its root to perversion and vitiation. This state of affairs is the source of that apparent disconnection between consciousness and action which strikes us when we begin to reflect. The connecting links between the two are in our own attitudes; while they remain unperceived, consciousness and behavior must appear to be independent of each other. Hence there will be empirical reason for isolating consciousness from natural events. When so isolated, some persons will assert that consciousness is a slavish and capricious shadow of things and others will proclaim that it is their rightful creator and master. Assertions, like those of this discussion, that consciousness is their recognized meaning when they are undergoing purposeful re-direction by means of organic activity will seem to lack full empirical evidence.

It remains to note and deal with two difficulties that have quite probably troubled the reader. In the first place, the discussion has explicitly gone on the basis that *what* is perceived are meanings, rather than just events or existences. In this respect, the view presented agrees with classic teaching, according to which perception,

apprehension, lays hold of form, not of matter. I believe this view properly understood is inherently sound; the error in the classic theory lies in its accompanying assumption that all perceptions are intrinsically cognitive. In the second place, the identification of consciousness with perceptive awareness runs counter to the verbal usage of recent psychology and philosophy which limits perception to apprehension (usually valid) of contemporaneously occurring events in "real" space. The latter issue however is not just a matter of propriety of language—about which it would be absurd to argue. It involves the conviction that perception of real things now existing differs *inherently* from other modes of consciousness, such as emotion, thinking, remembering, fancy and imagination. For this conviction, it must be explicitly noted, is contradicted by the conception which has been stated. According to the latter every mode of awareness—as distinct from "feeling"—in its immediate existence is exactly the same sort of thing, namely a remaking of meanings of events. The difference, it is implied, between awareness of present and "real" things and of absent and unreal is extrinsic, not intrinsic to a consciousness. The sequel will reveal that these two points are intimately connected with each other.

When it is denied that we are conscious of *events* as such it is not meant that we are not aware of *objects*. Objects are precisely what we are aware of. For objects are events *with* meanings; tables, the milky way, chairs, stars, cats, dogs, electrons, ghosts, centaurs, historic epochs and all the infinitely multifarious subject-matter of discourse designable by common nouns, verbs and their qualifiers. So intimate is the connection of meanings

with consciousness that there is no great difficulty in resolving "consciousness," as a recent original and ingenious thinker has done, into knots, intersections or complexes of universals.[2]

Serious difficulty sets in however when *events* are resolved into such combinations. The matter is referred to here not to be argued; but to indicate that a "realist" has gone even further than the theory now presented goes in identifying the subject-matter of which there is awareness with meanings, or at least with universals which, as simple subject-matter, colors, sounds, etc., and complex, plants, animals, atoms, etc., are precisely the same as meanings. To cause existences in their particularity to disappear into combinations of universals is at least an extreme measure. And the present thesis sticks to the common-sense belief that universals, relations, meanings, are of and about existences, not their exhaustive ingredients. The same existential events are capable of an infinite number of meanings. Thus an existence identified as "paper," because the meaning uppermost at the moment is "something to be written upon," has as many other explicit meanings as it has important consequences recognized in the various connective interactions into which it enters. Since possibilities of conjunction are endless, and since the consequences of any of them may at some time be significant, its potential meanings are endless. It signifies something to start a fire with; something like snow; made of wood-pulp; manufactured for profit; property in the legal sense; a definite combination illustrative of certain principles of chemical science; an article the inven-

[2] Holt, The Concept of Consciousness.

tion of which has made a tremendous difference in human history, and so on indefinitely. There is no conceivable universe of discourse in which the thing may not figure having in each its own characteristic meaning. And if we say that after all it is "paper" which has all these different meanings, we are at bottom but asserting that all the different meanings have a common existential reference, converging to the same event. We are virtually asserting that the *existence* whose usual, standardized meaning in discourse is paper, also has a multitude of other meanings; we are saying in effect that its existence is not exhausted in its being paper, although paper is its ordinary meaning for human intercourse.

Ghosts, centaurs, tribal gods, Helen of Troy and Ophelia of Denmark are as much the meanings of events as are flesh and blood, horses, Florence Nightingale and Madam Curie. This statement does not mark a discovery; it enunciates a tautology. It seems questionable only when its significance is altered; when it is taken to denote that, because they are all meanings of events, they all are the same kind of meaning with respect to validity of reference. Because perception of a ghost does not signify a subtle, intangible form, filling space as it moves about, it does not follow that it may not signify some other existential happening like disordered nerves; a religious animistic tradition; or, as in the play of Hamlet, that it may not signify an enhancement of the meaning of a moving state of affairs. The existential events that form a drama have their own characteristic meanings, which are not the less meanings of those events because their import is dramatic, not authentically cognitive. So when men gather in secret to plot a conspiracy, their

lans are not the less meanings of certain events because hey have not been already carried out; and they remain neanings of events even if the conspiracy comes to naught.

The proposition that the perception of a horse is objectively valid and that of a centaur fanciful and mythical oes not denote that one is a meaning of natural events nd the other is not. It denotes that they are meanings eferable to *different* natural events, and that confused nd harmful consequences result from attributing them to he same events. The idea that the consciousness of a orse as now present and of a centaur differ *as* percepions, or states of awareness, is an illustration of the arm wrought by introspective psychology, which, here s elsewhere, treats *relationships of objects* as if they were nherent qualities of an immediate subject-matter, ignorng the fact that causal relationships to unperceived things re involved. The matter of the cognitive validity of the orse-perception and the cognitive invalidity of the centaur-perception is not an affair of intrinsic difference in ne two perceptions, which inspection of the two states of wareness as such can ever bring to light; it is a causal natter, brought to light as we investigate the causal ntecedents and consequents of the events having the neanings.

In other words, the difference between assertion of a erception, belief in it, and merely having it is an extrinsic ifference; the belief, assertion, cognitive reference is omething additive, never merely immediate. Genuinely o believe the centaur-meaning is to assert that events naracterized by it interact in certain ways with other ow unperceived events. Since belief that centaur has ne same kind of objective meaning as has horse denotes

expectation of like efficacies and consequences, the differ
ence of validity between them is extrinsic. It is capable o
being revealed only by the results of acting upon them
The awareness of centaur meaning is fanciful not simpl
because part of its conditions lie within the organism
part of the conditions of *any* perception, valid as well a
invalid, scientific as well as esthetic, lie within the organ
ism. Nor is it fanciful, simply because it is suppose
not to have adequate existential antecedents. Natura
conditions, physiological, physical and social, may b
specified in one case as in the other. But since the con
ditions in the two cases are different, consequences ar
bound to be different. Knowing, believing, involve
something additive and extrinsic to having a meanin

No knowledge is ever merely immediate. The propos
tion that the perception of a horse is valid and that
centaur is fanciful or hallucinatory, does not denote tha
there are two modes of awareness, differing intrinsicall
from each other. It denotes something with respect t
causation, namely, that while both have their adequat
antecedent conditions, the specific causal conditions ar
ascertained to be different in the two cases. Hence
denotes something with respect to consequences, namel
that action upon the respective meanings will bring t
light (to apparency or awareness) such different kinds
consequences that we should use the two meanings i
very different ways. Both acts and consequences l
outside the primary perceptions; both have to be dil
gently sought for and tested. Since conditions in the tw
cases *are* different, they operate differently. That i
they belong to different histories, and the matter of th
history to which a given thing belongs is just the matt

with which knowledge is concerned. The conscious or perceived affair is itself a consequence of antecedent conditions. But were this conscious or apparent (evident, focal) consequence the *only* consequence of the conditions, if there were not other as yet unapparent consequences, we should have absolutely no way to tell in what sequence of events a perception belongs, and hence absolutely no way of determining its validity or cognitive standing. It is because conditions which generate the perception of a horse have other and different consequences than the perception (and similarly of those which generate the idea of the centaur), that it is possible to make a distinction between the value in knowledge of the two ideas. By discovering the different sequential affairs to which they respectively belong we can differentiate their import for knowledge. Failure to recognize this fact is the ultimate condemnation, it may be remarked in passing, of idealistic theories of knowledge, which identify it with immediate consciousness. If an all-inclusive consciousness were to exist, it would be a piece of esthetic scenery, interesting or tedious as the case might be, but having no conceivable cognitive standing.

That a perception is cognitive means, accordingly, that it is used; it is treated as a sign of conditions that implicate other as yet unperceived consequences in addition to the perception itself. That a perception is *truly* cognitive means that its active use or treatment is followed by consequences which fit appropriately into the other consequences which follow independently of its being perceived. To discover that a perception or an idea is cognitively invalid is to find that the consequences which follow from acting upon it entangle and confuse the other

consequences which follow from the causes of the perception, instead of integrating or coördinating harmoniously with them. The special technique of scientific inquiry may be defined as consisting of procedures which make it possible to perceive the eventual agreement or disagreement of the two sets of consequences. For experience proves that it is possible for great disparity between them to exist, and yet the conflict not be perceived or else be explained away as of no importance.

Common-sense has no great occasion to distinguish between bare events and objects; objects being events-with-meanings. Events are present and operative *anyway;* what concerns us is their meanings expressed in expectations, beliefs, inferences, regarding their potentialities. The nearest approach that occurs in ordinary life to making the distinction is when there occurs some brute, dumb shock, which we are constrained to interpret, to assign meaning to, that is, to convert into an object. Such situations supply direct empirical evidence of the difference between events and objects; but common-sense does not need to formulate the difference as a distinction. Events have effects or consequences anyway; and since meaning is awareness of these consequences before they actually occur, reflective inquiry which converts an event into an object is the same thing as finding out a meaning which the event already possesses by imputation. It is the essence of common sense, one might say, to treat potentialities as given actualities; since its interest is universally practical, bent upon fruitage, there is no need to note its bent in any particular case. The eventual outcome is for it the "reality" of the present situation.

But not so with philosophic discourse. Philosophy
ıust explicitly note that the business of reflection is to
ake events which brutely occur and brutely affect us, to
onvert them into objects by means of inference as to their
robable consequences. These are the meanings imputed
o the events under consideration. Otherwise philosophy
nds itself in a hopeless impasse. For, apart from making
distinction between events and objects, it has no way of
ifferentiating cognitive from esthetic and literary mean-
ıgs, and within cognitive meanings it has no way of
istinguishing the valid from the invalid. The outcome
f failure in this respect is exemplified in those discussions
hich find an inherent and generic cognitive problem in
ıe occurrence of dreams, reveries and hallucinations,
problem other than the scientific one of ascertaining
ıeir antecedents and effects. For if intrinsic cognitive
ıtent is ascribed to all perceptions, or forms of awareness,
hich are alleged to pick out a "reality" to which they
efer as an image or sign, dreams, etc., have to be squared
o this assumption. Draw the distinction between events
ıd objects, and dream-objects are just what they are,
vents with one kind of meaning, while scientific-objects are
ıst what they are, events with another kind of meaning,
kind that involves an extrinsic and additive function
ot contained in dream-objects.

In formulating the distinction between existences and
ojects of reference, whether cognitive, esthetic or moral,
ıilosophy does not exact that violent break with com-
ıon sense which is found in the assertion of idealism that
vents themselves are composed of meanings. Nor does
involve that break with common sense found in episte-
ıological realism, with its assertion of a direct dealing

of mind with naked existences unclothed by the inter vention of meanings. Philosophy has only to state, t make explicit, the difference between events which ar challenges to thought and events which have met th challenge and hence possess meaning. It has only t note that bare occurrence in the way of having, being or undergoing is the provocation and invitation to thought- seeking and finding unapparent connections, so that think ing terminates when an object is present: namely, whe a challenging event is endowed with stable meaning through relationship to something extrinsic but connected

There is nothing new in the facts contained in this state ment. It was an axiom of the classic theory that form not matter, is the object of knowledge. And many othe theories, in spite of the violence with which they nominall protest against the statement that existences as such ar not the objects of knowledge, contain the essential fact though in an incredible form. It is straining at a gna and swallowing a camel to balk at the proposition that w mentally are concerned with events in their meanings an not in themselves, and at the same time to welcome th proposition that the immediate objects of all consciou ness are sensations and complexes of sensations, terme images or ideas. For if by sensations (or by sensa) meant not mere shocks in feeling, but something qualita tive and capable of objective reference, then sensation are but one class of meanings. They are a class of mean ings which embody the mature results of elaborate exper mental inquiry in tracing out causal dependencies and rel tionships. This inquiry depends upon prior possession a system of meanings, physical theories of light, sound, etc and of knowledge of nervous structures and functions.

The alleged primacy of sensory meanings is mythical. They are primary only in logical status; they are primary as tests and confirmation of inferences concerning matters of fact, not as historic originals. For, while it is not usually needful to carry the check or test of theoretical calculations to the point of irreducible sensa, colors, sounds, etc., these sensa form a limit approached in careful analytic certifications, and upon critical occasions it is necessary to touch the limit. The transformation of these ulterior checking meanings into existential primary data is but another example of domination by interest in results and fruits, plus the fallacy which converts a functional office into an antecedent existence. Sensa are the class of irreducible meanings which are employed in verifying and correcting other meanings. We actually set out with much coarser and more inclusive meanings and not till we have met with failure from their use do we even set out to discover those ultimate and harder meanings which are sensory in character.

The theory that awareness is intrinsically possessed of cognitive reference and intent is Protean in the forms it has assumed in the history of thought. One of these forms, that knowledge is recognition, is worth special attention. The idea that the act of knowing is always one of recognizing or noting is certain to lead the mind astray; dialectically, it breaks upon the impossibility entailed of instituting an initial act of knowing; it commits its holder to a Platonic prior intuition in the realm of eternity. It is easy to see, however, how the idea suggested itself and gained credence. Recognition, identified and distinguished meaning, is an indispensable condition of effective experience. It is a prerequisite of

successful practise; except in so far as the situation i which we are to act is distinguished as having a notabl character, behavior is hopelessly at a loss. It is a pre requisite to an act of knowing; for without possession of recognized meaning, there is nothing to know with; ther is no indication of the direction inquiry has to take, or o the universe within which inquiry falls. But, recogni tion is not cognition. It is what the word implicitl conveys; *re*-cognition; not in the sense that an act o cognizing is repeated, but in the sense that there is a re minder of the meaning in which a former experienc terminated, and which may be used as an acceptable too in further activities.

Most theories of knowing which define a knowledge a an immediate noting seem at bottom to rest upon a con fusion of widely differing acts: one that of taking cogni zance, which means to pay heed to the apparent in terms o non-apparent consequences; and the other that of bein re-minded of something previously known, which is the used in the act of true, inferential, cognition. Recognitio is re-instatement of a meaning vouched for in some othe situation, plus a sense of familiarity, of immediate greet ing of welcome or aversion. It is exemplified in th experience of revisiting the scenes of childhood, with th emotional responses which familiar scenes evoke; it i found in the acknowledgements of the thoroughly practi cal man, who deferentially notes a character of existenc as something which, as a practical man, he must take int account in planning his conduct. Recognition is a nod either of voluntary piety or of coerced respect, not knowing.

There is another theory which makes "acquaintance" he primary mode of knowledge, and which treats cquaintance-knowledge as wholly immediate. Ac-uaintance is empirically distinguished from knowing *bout* a thing, and from knowing *that* a thing is thus and o. It is genuinely cognitive. But it has its distinctive eatures because it involves something more than bare resence of an identified meaning; it involves expectancy hich is an extrinsic reference; it involves a judgment s to what the object of acquaintance will do in connec-ion with other events. To be acquainted with a man is t least to "know him by sight" as we truly say; it is to se a meaning conditioned by present vision to form a upposition about something not seen: how the man will ehave under other circumstances than those of just eing seen. To be *acquainted* with a man is to forecast is general life of conduct; it is to have insight into *haracter*. And insight, as distinct from sight, means hat sight is employed to form inferences regarding what s not seen. It passes beyond apparition of meaning. The difference between acquaintance and "knowing bout" or "knowing that" is genuine, but it is not a differ-nce between two kinds of knowledge, one immediate and he other mediate. The difference is an affair of accom-paniments, contexts and modes of response. The greater ntimacy and directness that marks acquaintance is ractical and emotional not logical. To be acquainted vith anything is to have the kind of expectancy of its consequences which constitutes an immediate readiness to ct, an adequate preparatory adjustment to whatever the hing in question may do. To know *about* it is to have a kind of knowledge which does not pass into direct response

until some further term has been supplied. Direct read
ness to act involves a sense of community; postpone
readiness a sense of aloofness. Where there is acquain
ance, there is an immediate emotion of participation i
the situations in which the object of acquaintance en
gages, sympathetic or antipathetic according as readines
takes the form of a disposition to favor or to hinde
Knowledge about a historic or literary figure passes int
acquaintance when one arrives at a point of imaginativ
foresight of his prospective conduct and dramaticall
shares in it. Knowledge that the earth is round become
acquaintance when, in some juncture of experience, th
meaning comes home to us, as we say, or we get a "realiz
ing sense" of it. Acquaintance, then, instead of being
mode of knowledge prior to knowledge about and knov
ledge that, marks a later stage in which the latter attai
full sense and efficacy.

It follows that theories which identify knowledge wit
acquaintance, recognition, definition and classificatio
give evidence, all the better for being wholly unintende
that we know not just events but events-with-meaning
To assert that knowledge is classification is to assert i
effect that kind, character, has overlaid and over ridde
bare occurrence and existence. To say that to know is t
define is to recognize that wherever there is knowledg
there is explicitly present a universal. To hold tha
cognition is recognition to concede that likeness, a rel
tion, rather than existence, is central. And to be a
quainted with anything is to be aware what it is *like*,
what *sort* of ways it is likely to behave. These feature
character, kind, sort, universal, likeness, fall within th
universe of meaning. Hence the theories which mak

them constitutive of knowledge acknowledge that *having* meanings is a prerequisite for knowing. This prerequisite, being universally required, has loomed so large that thinkers have been led to slur over the concrete differential quality of knowledge—a particular act of *taking*, using, responding to, the meanings involved. That curious piece of traditional "analytic" psychology in accordance with which all knowing is a fusion or association of sensation with images is more testimony in the same direction; "associated imagery" being a round about equivalent of events with meaning.

Finally, the notion that knowledge is contemplation is likewise accounted for. To contemplate is consciously to possess meanings; to behold them with relish; to view them so absorbingly as to revel in them. It is a name for the perception of significant characters, plus an emphatic allusion to an accompanying esthetic emotion. Hypotheses which, like the one advanced in this book and chapter, hold that no knowing takes place without an overt act of taking and employing things on the basis of their meanings, have been attacked as overdevoted to keeping busy; as ignoring the place and charm of contemplation. Well, contemplation assuredly has a place. But when it is ultimate, and is a fruition, knowing has stepped out of the picture; the vision is esthetic. This may be better than knowing; but its being better is no reason for mixing different things and attributing to knowledge characters belonging to an esthetic object. Omit the esthetic phase, the absorbing charm of contemplation, and what remains for a theory of knowledge is that meanings must be had before they can be used as means of bringing to apparition meanings now obscure and hidden.

If I were allowed to call to the witness stand bu one historic theory to give testimony to prove that whil there is no knowing without perception of meaning, ye that having meanings and rolling them over as sweet mor sels under the tongue are not knowing, I should summo the venerable doctrine that knowledge is contemplation

Another difficulty involved in the theory was men tioned; a difficulty contained in the fact that recent theo ries have limited the signification of perception. In it older usage, it designated any awareness, any "seeing" whether of objects, ideas, principles, conclusions or what ever. In recent literature it is usually restricted to "sense perception." There can be no quarrel about the meanin of words except a lexicographical quarrel. The issue a stake concerns then not the appropriate use of a word it concerns certain matters of fact which are implied o usually associated with the present restricted usage These implications are two: First, there exists a mode o consciousness or awareness which is original, primitive simple, and which refers immediately and intrinsically t things in space external to the organism at the time o perception. Secondly, this reference is originally, an *ex proprio motu*, cognitive. Now as against these implica tions, the theory which has been advanced asserts tha awareness in the form of auditory and visual perceptio is, whenever it is cognitive, just as much a matter of infer ential judgment, an instance of a way of taking and usin meanings, as is any proposition found in the science o physics.

In its general features, argument as to this point is t the same effect as that of the point just discussed But we may avoid repetition and introduce greater speci

ication by confining ourselves to the factual traits characeristic of perceptions of present objects in space; showing hat these, when they are cognitive, are highly selected nd artful instances of awareness, not primitive and nnocent. The current theory begins with a distinction etween peripherally initiated and centrally initiated wareness. Peripheral initiation is the defining mark of uch operations as are designated "perceptions." But warenesses do not come to us labelled "I am caused by an vent initiated on the surface of the body by other odies"; and "I on the contrary originate in an intrarganic event only indirectly connected with surfacehanges." The distinction is one made by analytic and lassifying thought. This fact is enough to place in oubt the notion that some modes of consciousness are riginally and intrinsically "sense-perception."

Moreover, there is no absolute separation between the kin and the interior of the body. No sooner is the disinction drawn than it has to be qualified. As a matter of act there is no such *thing* as an *exclusively* peripherally nitiated nervous event. Internal conditions, those of unger, blood-circulation, endocrine functions, persistnces of prior activities, pre-existent opened and blocked euronic connections, together with a multitude of other ntra-organic factors enter into the determination of a eripheral occurrence. And after the peripheral excitaon has taken place, its subsequent career is not selfetermined, but is affected by literally everything going n within the organism. It is pure fiction that a "sensaon", or peripheral excitation, or stimulus, travels undisurbed in solitary state in its own coach-and-four to enter he brain or consciousness in its purity. A particular

excitation is but one of an avalanche of contemporane ously occurring excitations, peripheral and from proprio ceptors; each has to compete with others, to make term with them; what happens is an integration of comple forces.

It requires therefore a highly technical apparatus o science to discriminate the exact place and nature of peripheral stimulation, and to trace its normal course t just the junction point where it becomes effective fo redirection of activity and thus capable of perception "Peripheral origin" marks an interpretation of events, discrimination scientifically valid and important, but n more an original datum than is the spectrum of Betelgeuse The same thesis holds good, of course, of the "conscious ness" corresponding to the centrally initiated processes To suppose that there are inherently marked off differen forms of awareness corresponding to the distinctio arrived at by technical analysis is as flagrant a case o hypostatizing as can be found. The theory that certai kinds or forms of consciousness intrinsically have a intellectual or cognitive reference to things present i space is merely the traditional theory that knowledge is a immediate grasp of Being, clothed in the terminology o recent physiology. While it is offered as if it were estab lished by physiological and psychological research, i reality it presents an intellectual hold-over, a notio picked up from early teachings which have not bee subjected to any critical examination; physiology an psychology merely afford a vocabulary with which t deck out an unconscionable survival.

Reference to peripheral stimulation of eye or ear or ski or nose is, whether of the simpler and popular kind or o

the more complex neurological kind, part of the technique of checking up the particular sort of extrinsic reference which should be given to an idea; discovery whether it is to be referred to a past, contemporary or future thing, or treated as due to wish and emotion. Even so, ascertainment of mode of stimulation and origin is always secondary and derived. We do not believe a thing to be "there" because we are directly cognizant of an external origin for our perception; we infer some external stimulation of our sensory apparatus because we are successfully engaged in motor response. Only when the latter fails, do we turn back and examine the matter of sensory stimulation. To say that I am now conscious of a typewriter as the source of sensory stimuli is to make a back-handed and sophisticated statement of the fact that I am engaged in active employment of the typewriter to produce certain consequences, so that what I am aware of is these consequences and the relation to them of parts of the typewriter as means of producing them. As matter of fact, we *never* perceive the peripheral stimuli to which we are at that given time responding.

The notion that these stimuli are the appropriate and normal objects of simple original perceptions represents, as we have just said, an uncritical acceptance by psychologists of an old logical and metaphysical dogma, one having neither origin nor justification within scientific psychology. We are aware only of stimuli to other responses than those which we are now making; we become aware of them when we analyze some performed total act to discover the mechanism of its occurrence. To become aware of an optical or auditory stimulation involved in an act signifies that we now apprehend that an

organic change is part of the means used in the act, so that soundness of its structure and working is requisite to efficient performance of the act. I do not usually, for example, hear the sounds made by the striking of the keys; hence I therefore bang at them or strike them unevenly. If I were better trained or more intelligent in the performance of this action, I should hear the sounds, for they would have ceased to be just stimuli and become means of direction of my behavior in securing consequences. Not having learned by the "touch-method," my awareness of contact-qualities as I hit the keys is intermittent and defective. Physiological stimulation of fingers is involved as a condition of my motor response, yet there is no consciousness of contact "sensations" or sensa. But if I used my sensory touch appreciation as means to the proper execution of the act of writing, I should be aware of these qualities. The wider and freer the employment of means, the larger the field of sensory perceptions.

It is usual in current psychology to assert or assume that qualities observed are those of the stimulus. This assumption puts the cart before the horse; qualities which are observed are those attendant upon response to stimuli. We are *observantly* aware (in distinction from inferentially aware) only of what *has* been done; we can perceive what is already there, what *has* happened. By description, a stimulus is not an object of perception, for stimulus is correlative to response, and is undetermined except as response occurs. I am not questioning as a fact of *knowledge* that certain things *are* the stimuli of visual and auditory perception. I am pointing out that we are aware of the stimulus only in terms of our response to them and of the conse-

uences of this response. Argument as to the impossibility f stimuli being the object of perception is of course dia- ctical; like all dialectic arguments it is not convincing if onfronted with facts to the contrary. But facts agree. he whiteness of the paper upon which words are being ritten and the blackness of the letters have been con- antly operative stimuli in what I have been doing. It equally certain that they have not been constantly erceived objects. If I have perceived them from time time, it is in virtue of prior responses of which they were onsequences, and because of the need of employing these ttained consequences as means in further action. In ne laboratory, as in the painter's studio, colors are spe- fic objects of perception. But as perceived, they are stimuli" only proleptically and by a shift in the universe f discourse.[3] The color now and here perceived, in onsequence of an organic adjustment to other stimuli nan color, is in subsequent situations a stimulus to other nodes of behavior, unconscious in so far as just a stimu- us; conscious as far as a deliberately utilized means. When color is perceived as it is, say, for painting or for natching colors in selection of dress goods, or in an esti- nate of the harmonious value of the hue of a wall-paper, for determining from a spectral line the nature of a nemical substance. It signifies that we are responding in uch a way as to form or bring into being a stimulus dequate to operate without being perceived. But in ne meantime in consciousness it is means to an act which

[3] The shift is evident in the fact that stimuli are stated as vibrations electro-magnetic disturbance or in similar fashion; now vibrations e not observed while color the consequence, the effected coordination, in direct consciousness.

will effect desired consequences. Shall this color be used? Will this particular piece of goods or pattern of wall paper serve the purpose in view? When such questions are determined, a final stimulus is achieved. What is then perceived is either some further consequence, or this consequence as a means in a new predicament, such as wearing the goods, hanging the wall-paper. The consciousness of stimuli marks the conclusion of an investigation, not an original datum; and what is discovered is not the stimuli to *that* act, the inquiry, but to some other act, past or prospective, and it marks the conversion of *de facto* stimulus into potential means. The question of stimuli is a question of existential causation; and if Hume's lesson had been learned as well as we flatter ourselves it is learned, we should be aware that any matter of causation refers to something extrinsic, to be reached by inquiry and inference.

We conclude, therefore, that while the word "perception" may be limited to designate awareness of objects contemporaneously affecting the bodily organs, there is no ground whatever for the assumption which has usually attended this narrowing of the older meaning of the word namely, that sense-perception has *intrinsic* properties or qualities marking it off from other forms of consciousness Much less is there justification for the assumption that such perceptions are the original form of elementary awareness from which other forms of cognitive consciousness develop. On the contrary sensory-perceptual meanings are specifically discriminated objects of awareness the discrimination takes place in the course of inquiry into causative conditions and consequences; the ultimate need for the inquiry is found in the necessity of dis-

overing what is to be done, or of developing a response uitably adapted to the requirements of a situation. When inquiry reveals that an object external to the organism is now operative and affecting the organism, the pertinency of overt action is established and the kind of vert adjustment that should be made is in evidence. Perceptual meanings (sensory-perceptual) contrast with ther meanings in that either (a) the latter cannot be vertly acted upon *now* or immediately, but only at a eferred time, when specified conditions now absent have een brought into being—conceptual meanings—; or (b) hat the latter are such that action upon them at *any* ime must be of a dramatic or literary or playful sort—on-cognitive meanings. The necessities of behavior nforce very early in life the difference between acts emanded at once, and those pertinent only at a later ime; yet making and refining the distinction is a matter f constant search and discovery, not, as the traditional heory presumes, an original and ready-made affair.

Thus we returned to the statement that apart from onsiderations of use and history there are no original nd inherent differences between valid meanings and neanings occurring in revery, desiring, fearing, remembering, all being *intrinsically* the same in relation to events. This fact contains in gist the condemnation of introspection.[4] It makes no difference in principle whether the ntrospective doctrine takes a dialectical form, as in he Cartesian-Spinozistic logical realism in which intrinsic

[4] It is not asserted that observations *called* introspection have never iven results. It *is* claimed that in such cases, the procedure does not onform to the theoretical definition of immediate inspection but involves he results of inquiries into relationships with things not directly present.

self-evidency, clearness, adequacy, or truth, are imputed to some conceptual meanings or ideas; or whether it takes the more usual form of assigning to things appearing in the field of consciousness intrinsic properties which may be read off by direct inspection and thereby used to denominate them as sensory, perceptual, conceptual, imaginative, fantastic, memory, emotional, volitional, etc. It is asserted that in every case, the basis of classification is extrinsic, an affair dependent upon a study, often hard to make, of generating conditions and of subsequent careers. The denominations are interpretations and like all interpretations are adequate only when controlled by wide and accurate information as to bodies of fact that are remote and extraneous. It is not too much to say that the introspective doctrine—much wider in logical scope than so-called introspective psychology—is the last desperate stand and fortress of the classic doctrine that knowledge is immediate grasp, intuition, envisagement, possession. It is this fact which constitutes the importance of the views that have been criticized. Until they have been criticized, until the assumption of immediate intrinsic differences in the meaning-objects of sensory perceptions, reveries, dreams, desires, emotions has been expelled, the actual relation of ideas to existences must remain an obscure and confused matter.

If one looks at the net results of physiological inquiry upon psychologist insight, one seems bound to conclude that while potentially they are enormous, actually they consist largely in making more emphatic and conspicuous the old metaphysical problem of the relation of mind and body, and in strengthening a leaning to the parallelistic hypothesis. The explanation is that they have not

en used for what they really are: an important part of r scientific resources with respect to the intelligent nduct of behavior in general, and the discrimination particular of various kinds of meanings from one other. It is one thing to employ, for example, the stinction between central and peripheral origin of the istence of this and that idea as part of the technique of termining their respective cognitive validities, and quite other to assume that ideas and conscious contents are ready intrinsically marked off in themselves (and there-re for direct observation or introspection), and that the oblem is simply to find physiological equivalents for eir distinction. As far as it is assumed that modes of nsciousness are in themselves already differentiated into nsory, perceptual, conceptual, imaginative, retentive, notional, conative (or may be so discriminated by direct spection), physiological study will consist simply of arch for the different bodily and neural processes that derlie these differences. The outcome is an exacer-tion of the traditional mind-body problem; the doctrine parallelism, instead of being either a scientific discov-y or a scientific postulate, is merely a formulation of the ginal psychological ready-made distinctions plus a ore detailed knowledge of physical existential conditions their occurrence.

If the problem is put as one of a more adequate control behavior through knowledge of its mechanism, the uation becomes very different. How should we treat particular meaning: as sound datum for inference, an effect of habit irrespective of present condition, as instance of desire, or a consequence of hope or fear, oken of some past psycho-physical maladjustment, or

how? Such questions as these are urgent questions i
the conduct of life. They are typical of questions whic
we must find a way of answering if we are to achieve an
method of mastering our own behavior similar to tha
which we have achieved in respect to heat and electricity
coal and iron. And knowledge of the conditions unde
which our meanings and our modes of taking and usin
them organically occur is an indispensable portion o
the technique of dealing with such questions. In princi
ple, there is no difference between the neurological inquir
and those astronomical inquiries which enable an astrono
mer to determine the standing and import of some ide
in his universe of discourse. The physiological inquirie
no more involve a peculiar problem of mind-body than d
the astronomical inquiries. Their subject-matter is par
of the objective matter-of-fact considerations which exten
and buttress inferential conclusions. In concrete subject
matter, they differ, being concerned with organic struc
tures and processes; but this is *only* a difference in con
crete subject-matter, like that between astronomica
and botanical. The peculiar importance of the physio
logical material is that in some form it enters as a facto
into the occurrence of every meaning and every ac
including the astronomical and botanical.

We return, accordingly, from this excursion to th
assertion that the objects of revery-consciousness ar
just as much cases of perceived meanings or ideas of even
as are those of sensory perceptual consciousness. *Only*
they are not as *good* objects with respect to direction o
subsequent conduct, including the conduct of knowledg
Revery-consciousness, and the influence upon beliefs o
affective wishes of which we are not aware, are fac

ucial for any theory of consciousness. If they support
e hypothesis that all consciousness is awareness of
eanings, they also seem at first sight to contradict the
pposition that the meanings perceived are those of
tural events. Since their objects are notoriously "un-
al," they seem to support the notion that consciousness
disconnected from physical events, and that any valid
nnection which may be set up, either in practical con-
ıct or in knowing, is adventitious.

There is indeed much to be said for the view that con-
iousness is originally a dream-like, irresponsible efflores-
nce, and that it gains reference to actual events in
ıture only under stern compulsion, and by way of
cidental coincidence. There are elements of truth in
is view, as against the orthodox tradition which makes
nsciousness architectonic, having righteous and rational
nformity as the corner stone of its structure. Ideas, ob-
cts of immediate awareness, are too desultory, fantastic,
d impertinent to be consistent with the classic tradition,
ether of the sensationalistic or the rationalistic schools.
ut the view of complete separation of existential con-
iousness from connection with physical things cannot be
aintained in view of what is known of its specifiable
nnections with organic conditions, and of the intimate,
broken connection of organic with extra-organic events.
can be maintained only by holding that the connection
consciousness in its varied forms with bodily action is
n-natural. The only reason for asserting this position
s in the dialectic compulsion of denial of quality to
tural events, and arrogation of superior existence to
usal antecedents.

Given the connection of meanings with environmental-organic integrations (including those of social intercourse) and there is nothing surprising that consciousness should often be of the revery and wish type. We find no great occasion for wonder in the fact that a person who has been taught that the sun moves around the earth, rising above it at sunrise and going under it at sunset, should himself hold that belief. Well, past consummatory experiences have taught the individual many things; they have taught him what conjunctions are agreeable and what disagreeable. Just as past teaching regarding sun and earth have conditioned subsequent behavior, have produced organic modifications in the way of habit which influence subsequent reactions, including interpretations, so with what was taught by having been implicated in a consummatory union of environment and organism. Here too a bias in organic modification is set up; it acts to perpetuate wherever possible, awareness of fruitions, and to avert perception of frustrations and inconvenient interruptions.

A consciousness which is set on the outside over against the course of nature, which is not a partaker in its moving changes, would have to conform to one or other of two schemes. In one alternative, the consciousness of such a being would be gifted with an infallible spectatorship conjoined with perfect innocency of impartial recordership; it would see and report the world exactly as if it were itself knowingly engaged in producing what it saw and reported. Or, in the other alternative, all consciousness would be so completely irrelevant to the world of which it is outside and beyond, that there would be no common denominator or common multiple. Obviously facts do not agree with either of these suppositions. W

ream, but the material of our dream life is the stuff of ur waking life. Revery is not first wholly detached from ojects of purposeful action and belief, coming later by scipline to acquire reference to them. Its objects con- st of the objects of daily concern subjected to a strange erspective, perverted in behalf of a bias. Such empiri- l facts as these, or the fact that the world of fancy is ie ordinary world as we like it to be, as we find it agree- ole, is fatal to any theory which seriously asserts the holesale irrelevance of the material of consciousness to ie things of the actual world. Irrelevance exists, but is relative and specifiable. An idea or emotion is relevant not as such, through and through, but because is a version of the meaning of events which if it were fferently edited would be relevant to actions *in* the orld to which it belongs.

To par-take and to per-ceive are allied performances. o perceive is a mode of partaking which occurs only nder complex conditions and with its own defining traits. verything of importance hangs upon what particular ie of the many possible ways of partaking is employed a given situation. The organism, wherever possible, rticipates *a son grè;* its taste and bias are conditioned, the degree of its susceptibility and retentiveness, upon ior *satisfactions*. If a man has experienced a world hich is good, why should not he act to remake a bad orld till it agrees with the good world which he has once ssessed? And if the task of overt transformation is o great for his powers, why should he not at least act so to get the renewed *sense* of a good world? These iestions express the working logic of human action; e first, the way of objective transformation, is the

method of action in the arts and sciences; the second, of action that is fanciful, "wish-fulfilling," romantic, myth-making.

The immense difference between the two modes of action has had to be learned. There is no original and intrinsic difference in the respective modes of consciousness accompanying the two kinds of acts. In some matters, the lesson is readily and quickly learned. Such matters constitute the objects of usual every-day sense perception, the objects of common-sense. Certain organic integrations have to occur if life is to continue. Sustenance must be had; destructive enemies must be kept away the help of others must be availed of. Meanings and ideas connected with these organic-environmental adjustments are substantially sound as far as adjustments are successfully made—and within limits they are ordinarily so made, or life ceases. Such gross ideas as a world of things and persons external to our personal wishes and fancies, and as the continuance of energies once set in motion, are so recurrently and emphatically taught that they are never sincerely doubted. Ideas of specific features of this external world (external to *us*, since it exacts so much of us in effort before it conforms to the needs that are most deeply ourselves), ideas of fire, food, furniture, weather and crops, of our friends and enemies, and of our own past and probable future, are so repeatedly presented in the connections of actions and so confirmed by consequences that they become matters of course substantially valid. They thus form a kind of privileged domain, which, although an island in a sea of ideas where ground is not readily touched, has been by too hasty and impatient theories taken to form the original and in

erent constitution of consciousness. In consequence, here is added to genuine natural realism which accepts he casual connection of ideas with events and their po-ential reference to subsequent events, a specious realistic heory which takes the island for a solid and complete ontinent. Characteristic traits of the whole continent f mind are then looked upon as if they were only in-idental faults and dislocations, to be explained away by ialectic ingenuity; or when the strata of fancy, illusion, rror and misinterpretation are realized, wholesale scep-icism is indulged in.

Gradually the technique involved in making ordinary rganic-environmental adjustments is discovered, and ecomes capable of extension to cases where fancy had reviously reigned. A larger and larger field of ideas ecomes susceptible of analytic objective reference, with he promise of approximate validity. The secret of this echnique lies in control of the *ways* in which the organ-m participates in the course of events. In the case of mple needs and simple environments, existing organic tructures practically enforce correct participation; the esult is so-called instinctive action. Within this range, odifications undergone by the organism form in the ain effective habits. But organic preparation for varied tuation having many factors and wide-reaching conse-uences is not so easily attained. Effective participa-on here depends upon the use of extra-organic conditions, hich supplement structural agencies; namely, tools and her persons, by means of language spoken and recorded. hus the ultimate buttress of the soundness of all but the mplest ideas consists in the cumulative objective appli-nces and arts of the community, not in anything found in consciousness" itself or within the organism.

If any evidence be needed of the artificial character o strictly epistemological discussion it may be found in th fact that it goes on exclusively in terms of an allege direct contact of "subject" and "object," with total neglec of all the indispensable tools of checking spontaneou beliefs and developing sound ones in their place. Pendu lums, lenses, prisms, yard sticks, and pound weights an multiplication and logarithmic tables have a great dea more to do with valid knowing, since they enable th organism to partake with other things in the effecting o consequences, than have bare consciousness or brain an nerves. Without such objective resources to direct th manner of engaging in responsive adaptations, ideas outside a simple range of constantly tested actions, ar at the mercy of any peculiarity of organic constitutio and of circumstance; myths are rife and the world i peopled with fabulous personages and is the home of occul forces. Since organic modifications due to past consum matory objects are dominant, since they lead an individua to find or make a world congenial to them; and since ma is most at home with his fellows, whether friends o enemies, the world is then taken animistically for th most part. Too many of the traditional ideas of life soul, mind, spirit, and consciousness, and of the cosmo itself, even in philosophy, are only attenuated version of this animism, spontaneous, and often gracious eve though fantastic, when men lacked instrumentalities b which to direct their active partakings in nature, bu which are now graceless and obstructive.

In conclusion, the fact that consciousness of meanings or having ideas, denotes an exigent re-making of meaning has an import for the theory of nature. Perceptibilit

is an exponent of contingency as it intersects the regular. The impossibility of "deducing" consciousness from physical laws, the "impassible gulf" between the physical and mental, are in reality but conspicuous cases of the general impossibility of deriving the contingent from the necessary, the uncertain from the regular. The anomaly apparent in the occurrence of consciousness is evidence of an anomalous phase in nature itself. Unless there were something problematic, undecided, still going-on and as yet unfinished and indeterminate, in nature, there could be no such events as perceptions. The point of maximum apparency is the point of greatest stress and undetermined potentiality; the point of maximum of restless shift, while also the point of greatest brightness; it is vivid, but not clear; imminent, urgently expressive of the impending, but not defined, till it has been disposed of and has ceased to be immediately focal. When philosophers have insisted upon the certainty of the immediately and focally present or "given" and have sought indubitable immediate existential data upon which to build, they have always unwittingly passed from the existential to the dialectical; they have substituted a general character for an immediate this. For the immediately given is always the dubious; it is always a matter for subsequent events to determine, or assign character to. It is a cry for something not given, a request addressed to fortune, with the pathos of a plea or the imperiousness of a command. It were, conceivably, "better" that nature should be finished through and through, a closed mechanical or closed teleological structure, such as philosophic schools have fancied. But in that case the flickering candle of consciousness would go out.

The immediate perceptibility of meanings, the very existence of ideas, testifies to insertion of the problematic and hazardous in the settled and uniform, and to the meeting, crossing and parting of the substantial, static and the transitive and particular. Meanings, characters as such have that solidity, coherence, endurance, and persistent availability, which our idiom calls substance. Yet were this the whole story, meanings not only would not be perceived, but they would not be meanings. They would be tough operative habits, having their own way not to be denied. Organic movements exist to which there occured in early life meanings so indurated that now they are habits of an over-riding power; meaning has disappeared in bare behavior. It is possible to understand the regret with which some persons contemplate the passage of thought into act; to them it seems the obsequies of an idea; thought has been dissipated in an outward mechanical sequence. Similarly, one may feel that the important and interesting thing in human history is not what men have done, their successes, but what they failed in doing—the desires and imaginings, forbidden execution by the force of events. Ideas are largely the obverse side of action; a perception of what might be, but is not, the promise of things hoped for, the symbol of things not seen. A fixed idea is no idea at all, but a routine compulsion of overt action, perfunctorily and mechanically named idea.

"Pure reason" would thus not be rational at all, but an automatic habit; a substance so stable and pervading as to have no limits and vicissitudes, and hence no perceptibility. "Pure" reasoning is best carried on by fixed symbols, automatically manipulated; its ideal is some-

thing approaching the well-devised mechanically operative calculating machine. Unless nature had regular habits, persistent ways, so compacted that they time, measure and give rhythm and recurrence to transitive flux, meanings, recognizable characters, could not be. But also without an interplay of these patient, slow-moving, not easily stirred systems of action with swift-moving, unstable, unsubstantial events, nature would be a routine unmarked by ideas. Adjustment of the slow moving changes of nature to its sudden starts and trepidations, such as gives some degree of order to the latter and as re-adapts the motions of the sluggish and inert core to the volatile surface of hasty movements, makes necessary a conversion of static orders into stable meanings, while it also renders them perceptible, or ideas, as they answer to the flux of things.

Finally, as psycho-physical qualities testify to the presence in nature of needs and satisfactions, of uneasy efforts and their arrest in some limiting termination, so conscious or conspicuously apparent meanings, ideas, are exponents of the deliberate use of the efficacious in behalf of the fulfilling and consummatory, and of the efficient or instrumental nature of the final. This situation is empirically present to us in the arts, and will be discussed in the immediate sequel. For our immediate purpose, it is enough to point out the difference between the explicit natural teleology of classic metaphysics and the implicit teleology of modern science. In the former, the bare *de facto* arrests of nature, which often mark merely exhaustion or else limits imposed by competing energies, were by a *tour de force* assigned eulogistic properties. They were identified with the objects that should be the objects of

choice by persons of mature and reflective experience. Thus physics was unwittingly infected by importation of an uncriticized ethic of customary and fixed ends, and of a dialectically ordered hierarchy of fixed means. The identification in modern thought of ends with ends-in-view, with deliberate purpose and planning, of means with deliberately selected and arranged inventions and artifices, is in effect a recognition that the teleology of nature is achieved and exhibited by nature in thinking, not apart from it. If modern theories have often failed to note this implication and have instead contented themselves with a denial of all teleology, the reason is adventitious; it is found in the gratuitous breach of continuity between nature, life, and man.

"This," whatever *this* may be, always implies a system of meanings focussed at a point of stress, uncertainty, and need of regulation. It sums up history, and at the same time opens a new page; it is record and promise in one; a fulfillment and an opportunity. It is a fruition of what has happened and a transitive agency of what is to happen. It is a comment written by natural events on their own direction and tendency, and a surmise of whither they are leading. Every perception, or awareness, marks a "this," and every "this" being a consummation involves retention, and hence contains the capacity of remembering. Every "this" is transitive, momentarily becoming a "that." In its movement it is, therefore, conditioning of what is to come; it presents the potentiality of foresight and prediction. The union of past and future with the present manifest in every awareness of meanings is a mystery only when consciousness is gratuitiously divided from nature, and when nature is denied

temporal and historic quality. When consciousness is connected with nature, the mystery becomes a luminous revelation of the operative interpenetration in nature of the efficient and the fulfilling.

CHAPTER NINE

Experience, Nature and Art

Experience, with the Greeks, signified a store of practical wisdom, a fund of insights useful in conducting the affairs of life. Sensation and perception were its occasion and supplied it with pertinent materials, but did not of themselves constitute it. They generated experience when retention was added and when a common factor in the multitude of felt and perceived cases detached itself so as to become available in judgment and exertion. Thus understood, experience is exemplified in the discrimination and skill of the good carpenter, pilot, physician, captain-at-arms; experience is equivalent to art. Modern theory has quite properly extended the application of the term to cover many things that the Greeks would hardly have called "experience," the bare having of aches and pains, or a play of colors before the eyes. But even those who hold this larger signification would admit, I suppose, that such "experiences" count only when they result in insight, or in an enjoyed perception, and that only thus do they define experience in its honorific sense.

Greek thinkers nevertheless disparaged experience in comparison with something called reason and science. The ground for depreciation was not that usually assigned in modern philosophy; it was not that experience is "subjective." On the contrary, experience was considered to be a genuine expression of cosmic forces, not an exclusive attribute or possession of animal or of human nature. It was taken to be a realization of inferior pow

tions of nature, those infected with chance and change, the less *Being* part of the cosmos. Thus while experience meant art, art reflected the contingencies and partialities of nature, while science—theory—exhibited its necessities and universalities. Art was born of need, lack, deprivation, incompleteness, while science—theory—manifested fullness and totality of Being. Thus the depreciatory view of experience was identical with a conception that placed practical activity below theoretical activity, finding the former dependent, impelled from outside, marked by deficiency of real being, while the latter was independent and free because complete and self-sufficing: that is perfect.

In contrast with this self-consistent position we find a curious mixture in modern thinking. The latter feels under no obligation to present a theory of natural existence that links art with nature; on the contrary, it usually holds that science or knowledge is the only *authentic* expression of nature, in which case art must be an arbitrary addition to nature. But modern thought also combines exaltation of science with eulogistic appreciation of art, especially of fine or creative art. At the same time it retains the substance of the classic disparagement of the practical in contrast with the theoretical, although formulating it in somewhat different language: to the effect that knowledge deals with objective reality as it is in itself, while in what is "practical," objective reality is altered and cognitively distorted by subjective factors of want, emotion and striving. And yet in its encomium of art, it fails to note the commonplace of Greek observation—that the fine arts as well as the industrial technologies are affairs of practice.

This confused plight is partly cause and partly effect of an almost universal confusion of the artistic and the esthetic. On one hand, there is action that deals with materials and energies outside the body, assembling, refining, combining, manipulating them until their new state yields a satisfaction not afforded by their crude condition—a formula that applies to fine and useful art alike. On the other hand, there is the delight that attends vision and hearing, an enhancement of the receptive appreciation and assimilation of objects irrespective of participation in the operations of production. Provided the difference of the two things is recognized, it is no matter whether the words "esthetic" and "artistic" or other terms be used to designate the distinction, for the difference is not one of words but of objects. But in some form the difference must be acknowledged.

The community in which Greek art was produced was small; numerous and complicated intermediaries between production and consumption were lacking; producers had a virtually servile status. Because of the close connection between production and enjoyable fruition, the Greeks in their perceptive uses and enjoyments were never wholly unconscious of the artisan and his work, not even when they personally were exclusively concerned with delightful contemplation. But since the artist was an artisan (the term artist having none of the eulogistic connotations of present usage), and since the artisan occupied an inferior position, the enjoyment of works of any art did not stand upon the same level as enjoyment of those objects for the realization of which manual activity was not needed. Objects of rational thought, of contemplative insight were the only things that met the

specification of freedom from need, labor, and matter. They alone were self-sufficient, self-existent, and self-explanatory, and hence enjoyment of *them* was on a higher plane than enjoyment of works of art.

These conceptions were consistent with one another and with the conditions of social life at the time. Nowadays we have a messy conjunction of notions that are consistent neither with one another nor with the tenor of our actual life. Knowledge is still regarded by most thinkers as direct grasp of ultimate reality, although the practice of knowing has been assimilated to the procedure of the useful arts;—involving, that is to say, doing that manipulates and arranges natural energies. Again while science is said to lay hold of reality, yet "art" instead of being assigned a lower rank is equally esteemed and honored. And when within art a distinction is drawn between production and appreciation, the chief honor usually goes to the former on the ground that it is "creative," while taste is relatively possessive and passive, dependent for its material upon the activities of the creative artist.

If Greek philosophy was correct in thinking of knowledge as contemplation rather than as a productive art, and if modern philosophy accepts this conclusion, then the only logical course is relative disparagement of all forms of production, since they are modes of practice which is by conception inferior to contemplation. The artistic is then secondary to the esthetic: "creation," to "taste," and the scientific *worker*—as we significantly say—is subordinate in rank and worth to the dilettante who enjoys the results of his labors. But if modern tendencies are justified in putting art and creation first,

then the implications of this position should be avowed and carried through. It would then be seen that science is an art, that art is practice, and that the only distinction worth drawing is not between practice and theory but between those modes of practice that are not intelligent, not inherently and immediately enjoyable, and those which are full of enjoyed meanings. When this perception dawns, it will be a commonplace that art—the mode of activity that is charged with meanings capable of immediately enjoyed possession—is the complete culmination of nature, and that "science" is properly a handmaiden that conducts natural events to this happy issue. Thus would disappear the separations that trouble present thinking: division of everything into nature *and* experience, of experience into practice *and* theory, art *and* science, of art into useful *and* fine, menial *and* free.

Thus the issue involved in experience as art in its pregnant sense and in art as processes and materials of nature continued by direction into achieved and enjoyed meanings, sums up in itself all the issues which have been previously considered. Thought, intelligence, science is the intentional direction of natural events to meanings capable of immediate possession and enjoyment; this direction—which is operative art—is itself a natural event in which nature otherwise partial and incomplete comes fully to itself; so that objects of conscious experience when reflectively chosen, form the "end" of nature. The doings and sufferings that form experience are, in the degree in which experience is intelligent or charged with meanings, a union of the precarious, novel, irregular with the settled, assured and uniform—a union which also defines the artistic and the esthetic. For wherever there is art the

contingent and ongoing no longer work at cross purposes with the formal and recurrent but commingle in harmony. And the distinguishing feature of conscious experience, of what for short is often called "consciousness," is that in it the instrumental and the final, meanings that are signs and clews and meanings that are immediately possessed, suffered and enjoyed, come together in one. And all of these things are preëminently true of art.

First, then, art is solvent union of the generic, recurrent, ordered, established phase of nature with its phase that is incomplete, going on, and hence still uncertain, contingent, novel, particular; or as certain systems of esthetic theory have truly declared, though without empirical basis and import in their words, a union of necessity and freedom, a harmony of the many and one, a reconciliation of sensuous and ideal. Of any artistic act and product it may be said both that it is inevitable in its rightness, that nothing in it can be altered without altering all, and that its occurrence is spontaneous, unexpected, fresh, unpredictable. The presence in art, whether as an act or a product, of proportion, economy, order, symmetry, composition, is such a commonplace that it does not need to be dwelt upon. But equally necessary is unexpected combination, and the consequent revelation of possibilities hitherto unrealized. "Repose in stimulation" characterizes art. Order and proportion when they are the whole story are soon exhausted; economy in itself is a tiresome and restrictive taskmaster. It is artistic when it releases.

The more extensive and repeated are the basic uniformities of nature that give form to art, the "greater" is the art, provided—and it is this proviso that distinguishes

art—they are indistinguishably fused with the wonder o the new and the grace of the gratuitous. "Creation" may be asserted vaguely and mystically; but it denote something genuine and indispensable in art. The merely finished is not fine but ended, done with, and the merely "fresh" is that bumptious impertinence indicated by the slang use of the word. The "magic" of poetry—and pregnant experience has poetical quality—is precisely the revelation of meaning in the old effected by its presentation through the new. It radiates the light that never was on land and sea but that is henceforth an abiding illumination of objects. Music in its immediate occurrence is the most varied and etherial of the arts but is in its conditions and structure the most mechanical These things are commonplaces; but until they are commonly employed in their evidential significance for a theory of nature's nature, there is no cause to apologize for their citation.

The limiting terms that define art are routine at one extreme and capricious impulse at the other. It is hardly worth while to oppose science and art sharply to one another, when the deficiencies and troubles of life are so evidently due to separation between art and blind routine and blind impulse. Routine exemplies the uniformities and recurrences of nature, caprice expresses its inchoate initiations and deviations. Each in isolation is unnatural as well as inartistic, for nature is an intersection of spontaneity and necessity, the regular and the novel, the finished and the beginning. It is right to object to much of current practice on the ground that it is routine, just as it is right to object to much of our current enjoyments on the ground that they are spasms of excited

escape from the thraldom of enforced work. But to transform a just objection against the quality of much of our practical life into a description and definition of practice is on the same plane as to convert legitimate objection to trivial distraction, senseless amusement, and sensual absorption, into a Puritanical aversion to happiness. The idea that work, productive activity, signifies action carried on for merely extraneous ends, and the idea that happiness signifies surrender of mind to the thrills and excitations of the body are one and the same idea. The first notion marks the separation of activity from meaning, and the second marks the separation of receptivity from meaning. Both separations are inevitable as far as experience fails to be art:—when the regular, repetitious, and the novel, contingent in nature fail to sustain and inform each other in a productive activity possessed of immanent and directly enjoyed meaning.

Thus the theme has insensibly passed over into that of the relation of means and consequence, process and product, the instrumental and consummatory. Any activity that is simultaneously both, rather than in alternation and displacement, is art. Disunion of production and consumption is a common enough occurrence. But emphasis upon this separation in order to exalt the consummatory does not define or interpret either art or experience. It obscures their meaning, resulting in a division of art into useful and fine, adjectives which, when they are prefixed to "art," corrupt and destroy its intrinsic significance. For arts that are merely useful are not arts but routines; and arts that are merely final are not arts but passive amusements and distractions, different from other indulgent dissipations only in dependence upon a certain acquired refinement or "cultivation."

The existence of activities that have no immediate enjoyed intrinsic meaning is undeniable. They include much of our labors in home, factory, laboratory and study. By no stretch of language can they be termed either artistic or esthetic. Yet they exist, and are so coercive that they require some attentive recognition. So we optimistically call them "useful" and let it go at that, thinking that by calling them useful we have somehow justified and explained their occurrence. If we were to ask useful for what? we should be obliged to examine their actual consequences, and when we once honestly and fully faced these consequences we should probably find ground for calling such activities detrimental rather than useful.

We call them useful because we arbitrarily cut short our consideration of consequences. We bring into view simply their efficacy in bringing into existence certain commodities we do not ask for their effect upon the quality of human life and experience. They are useful to make shoes houses, motor cars, money, and other things which *may* then be put to use; here inquiry and imagination stop. What they also *make* by way of narrowed, embittered, and crippled life, of congested, hurried, confused and extravagant life, is left in oblivion. But to be useful is to fulfil need. The characteristic human need is for possession and appreciation of the meaning of things, and this need is ignored and unsatisfied in the traditional notion of the useful. We identify utility with the external relationship that some events and acts bear to other things that are their products, and thus leave out the only thing that is essential to the idea of utility, inherent place and bearing in experience. Our classificatory use of the

conception of some arts as merely instrumental so as to dispose of a large part of human activity is no solving definition; it rather conveys an immense and urgent problem.

The same statement applies to the conception of merely fine or final arts and works of art. In point of fact, the things designated by the phrase to fall under three captions. There are activities and receptivities to which the name of "self-expression" is often applied as a eulogistic qualification, in which one indulges himself by giving free outward exhibition to his own states without reference to the conditions upon which intelligible communication depends—an act also sometimes known as "expression of emotion," which is then set up for definition of all fine art. It is easy to dispose of this art by calling it a product of egotism due to balked activity in other occupations. But this treatment misses a more significant point. For all art is a process of making the world a different place in which to live, and involves a phase of protest and of compensatory response. Such art as there is in these manifestations lies in this factor. It is owing to frustration in communication of meanings that the protest becomes arbitrary and the compensatory response wilfully eccentric.

In addition to this type—and frequently mingled with it—there is experimentation in new modes or craftsmanship, cases where the seemingly bizarre and over-individualistic character of the products is due to discontent with existing technique, and is associated with an attempt to find new modes of language. It is aside from the point either to greet these manifestations as if they constituted art for the first time in human history, or to condemn them as not art because of their violent departures from received

canons and methods. Some movement in this direction has always been a condition of growth of new forms, a condition of salvation from that mortal arrest and decay called academic art.

Then there is that which in quantity bulks most largely as fine art: the production of buildings in the name of the art of architecture; of pictures in the name of the art of painting; of novels, dramas, etc., in the name of literary art; a production which in reality is largely a form of commercialized industry in production of a class of commodities that find their sale among well-to-do persons desirous of maintaining a conventionally approved status. As the first two modes carry to disproportionate excess that factor of particularity, contingency and difference which is indispensable in all art, deliberately flaunting avoidance of the repetitions and order of nature; so this mode celebrates the regular and finished. It is reminiscent rather than commemorative of the meanings of experienced things. Its products remind their owner of things pleasant in memory though hard in direct-undergoing, and remind others that their owner has achieved an economic standard which makes possible cultivation and decoration of leisure.

Obviously no one of these classes of activity and product or all of them put together, mark off anything that can be called distinctively fine art. They share their qualities and defects with many other acts and objects. But, fortunately, there may be mixed with any one of them, and, still more fortunately, there may occur without mixture, process and product that are characteristically excellent. This occurs when activity is productive of an object that affords continuously renewed delight.

This condition requires that the object be, with its successive consequences, indefinitely instrumental to *new* satisfying events. For otherwise the object is quickly exhausted and satiety sets in. Anyone who reflects upon the commonplace that a measure of artistic products is their capacity to attract and retain observation with satisfaction under whatever conditions they are approached, while things of less quality soon lose capacity to hold attention becoming indifferent or repellent upon subsequent approach, has a sure demonstration that a genuinely esthetic object is not exclusively consummatory but is casually productive as well. A consummatory object that is not also instrumental turns in time to the dust and ashes of boredom. The "eternal" quality of great art is its renewed instrumentality for further consummatory experiences.

When this fact is noted, it is also seen that limitation of fineness of art to paintings, statues, poems, songs and symphonies is conventional, or even verbal. Any activity that is productive of objects whose perception is an immediate good, and whose operation is a continual source of enjoyable perception of other events exhibits fineness of art. There are acts of all kinds that directly refresh and enlarge the spirit and that are instrumental to the production of new objects and dispositions which are in turn productive of further refinements and replenishments. Frequently moralists make the acts *they* find excellent or virtuous wholly final, and treat art and affection as mere means. Estheticians reverse the performance, and see in good *acts* means to an ulterior external happiness, while esthetic appreciation is called a good in itself, or that strange thing an end in itself. But on

both sides it is true that in being preëminently fructifying the things designated means are immediate satisfactions. They are their own excuses for being just because they are charged with an office in quickening apprehension, enlarging the horizon of vision, refining discrimination, creating standards of appreciation which are confirmed and deepened by further experiences. It would almost seem when their non-instrumental character is insisted upon as if what was meant were an indefinitely expansive and radiating instrumental efficacy.

The source of the error lies in the habit of calling by the name of means things that are not means at all; things that are only external and accidental antecedents of the happening of something else. Similarly things are called ends that are not ends save accidentally, since they are not fulfilments, consummatory, of means, but merely last terms closing a process. Thus it is often said that a laborer's toil is the means of his livelihood, although except in the most tenuous and arbitrary way it bears no relationship to his real living. Even his wage is hardly an end or consequence of his labor. He might—and frequently does—equally well or ill—perform any one of a hundred other tasks as a condition of receiving payment. The prevailing conception of instrumentality is profoundly vitiated by the habit of applying it to cases like the above where, instead of an operation of means, there is an enforced necessity of doing one thing as a coerced antecedent of the occurrence of another thing which is wanted.

Means are always at least causal conditions; but causal conditions are means only when they possess an added qualification; that, namely, of being freely used, because of perceived connection with chosen consequences. To

entertain, choose and accomplish anything as an end or consequence is to be committed to a like love and care for whatever events and acts are its means. Similarly, consequences, ends, are at least effects; but effects are not ends unless thought has perceived and freely chosen the conditions and processes that are their conditions. The notion that means are menial, instrumentalities servile, is more than a degradation of means to the rank of coercive and external necessities. It renders all things upon which the name of end is bestowed accompaniments of privilege, while the name of utility becomes an apologetic justification for things that are not portions of a good and reasonable life. Livelihood is at present not so much the consequence of a wage-earner's labor as it is the effect of other causes forming the economic régime, labor being merely an accidental appendage of these other causes.

Paints and skill in manipulative arrangement are means of a picture as end, because the picture is *their* assemblage and organization. Tones and susceptibility of the ear when properly interacting are the means of music, because they constitute, make, are, music. A disposition of virtue is a means to a certain quality of happiness because it is a constituent of that good, while such happiness is means in turn to virtue, as the sustaining of good in being. Flour, water, yeast are means of bread because they are ingredients of bread; while bread is a factor *in* life, not just *to* it. A good political constitution, honest police-system, and competent judiciary, are means of the prosperous life of the community because they are integrated portions of that life. Science is an instrumentality of and for art because it is the intelligent factor *in* art. The trite saying that a hand is not a hand except as an organ

of the living body—except as a working coördinated part of a balanced system of activities—applies untritely to all things that are means. The connection of means-consequences is never one of bare succession in time, such that the element that is means is past and gone when the end is instituted. An active process is strung out temporarily, but there is a deposit at each stage and point entering cumulatively and constitutively into the outcome. A genuine instrumentality *for* is always an organ *of* an end. It confers continued efficacy upon the object in which it is embodied.

The traditional separation between some things as mere means and others as mere ends is a reflection of the insulated existence of working and leisure classes, of production that is not also consummatory, and consummation that is not productive. This division is not a *merely* social phenomenon. It embodies a perpetuation upon the human plane of a division between need and satisfaction belonging to brute life. And this separation expresses in turn the mechanically external relationship that exists in nature between situations of disturbed equilibrium, of stress, and strain, and achieved equilibrium. For in nature, outside of man, except when events eventuate in "development" or "evolution" (in which a cumulative carrying forward of consequences of past histories in new efficiencies occurs) antecedent events are external transitive conditions of the occurrence of an event having immediate and static qualities. To animals to whom acts have no meaning, the change in the environment required to satisfy needs has no significance on its own account; such change is a mere incident of ego-centric satisfactions. This physically external relationship

of antecedents and consequents is perpetuated; it continues to hold true of human industry wherever labor and its materials and products are externally enforced necessities for securing a living. Because Greek industry was so largely upon this plane of servile labor, all industrial activity was regarded by Greek thought as a *mere* means, an extraneous necessity. Hence satisfactions due to it were conceived to be the ends or goods of purely animal nature in isolation. With respect to a truly human and rational life, they were not ends or goods at all, but merely "means," that is to say, external conditions that were antecedently enforced requisites of the life conducted and enjoyed by free men, especially by those devoted to the acme of freedom, pure thinking. As Aristotle asserted, drawing a just conclusion from the assumed premises, there are classes of men who are necessary materials of society but who are not integral parts of it. And he summed up the whole theory of the external and coerced relationship of means and ends when he said in this very connection that: "When there is one thing that is means and another thing that is end, there is *nothing common* between them, except in so far as the one, the means, produces, and the other, the end, receives the product."

It would thus seem almost self-evident that the distinction between the instrumental and the final adopted in philosophic tradition as a solving word presents in truth a problem, a problem so deep-seated and far-reaching that it may be said to be *the* problem of experience. For all the intelligent activities of men, no matter whether expressed in science, fine arts, or social relationships, have for their task the conversion of causal bonds, relations of succession, into a connection of means-consequence, into

meanings. When the task is achieved the result is art and in art everything is common between means and ends Whenever so-called means remain external and servile and so-called ends are enjoyed objects whose furthe causative status is unperceived, ignored or denied, th situation is proof positive of limitations of art. Such situation consists of affairs in which the problem has *n* been solved; namely that of converting physical and brut relationships into connections of meanings characteristi of the possibilities of nature.

It goes without saying that man begins as a part o physical and animal nature. In as far as he reacts t physical things on a strictly physical level, he is pulle and pushed about, overwhelmed, broken to pieces, lifted o the crest of the wave of things, like anything else. Hi contacts, his sufferings and doings, are matters of direc interaction only. He is in a "state of nature." As a animal, even upon the brute level, he manages to subor dinate some physical things to his needs, converting ther into materials sustaining life and growth. But in so fa things that serve as material of satisfaction and the act that procure and utilize them are not objects, or things with-meanings. That appetite as such is blind, is notor ous; it may push us into a comfortable result instead o into disaster; but we are pushed just the same. Whe appetite is perceived in its meanings, in the consequence it induces, and these consequences are experimente with in reflective imagination, some being seen to be cor sistent with one another, and hence capable of co-exis ence and of serially ordered achievement, others bein incompatible, forbidding conjunction at one time, an getting in one another's way serially—when this estat

is attained, we live on the human plane, responding to things in their meanings. A relationship of cause- effect has been transformed into one of means-consequence. Then consequences belong *integrally* to the conditions which may produce them, and the latter possess character and distinction. The meaning of causal conditions is carried over also into the consequence, so that the latter is no longer a mere end, a last and closing term of arrest. It is marked out in perception, distinguished by the efficacy of the conditions which have entered into it. Its value as fulfilling and consummatory is measurable by subsequent fulfillments and frustrations to which it is contributory in virtue of the causal means which compose it.

Thus to be conscious of meanings or to have an idea, marks a fruition, an enjoyed or suffered arrest of the flux of events. But there are all kinds of ways of perceiving meanings, all kinds of ideas. Meaning may be determined in terms of consequences hastily snatched at and torn loose from their connections; then is prevented the formation of wider and more enduring ideas. Or, we may be aware of meanings, may achieve ideas, that unite wide and enduring scope with richness of distinctions. The latter sort of consciousness is more than a passing and superficial consummation or end: it takes up into itself meanings covering stretches of existence wrought into consistency. It marks the conclusion of long continued endeavor; of patient and indefatigable search and test. The idea is, in short, art and a work of art. As a work of art, it directly liberates subsequent action and makes it more fruitful in a creation of more meanings and more perceptions.

It is the part of wisdom to recognize how sparse an insecure are such accomplishments in comparison wit experience in which physical and animal nature largel have their way. Our liberal and rich ideas, our adequat appreciations, due to productive art are hemmed in by a unconquered domain in which we are everywhere expose to the incidence of unknown forces and hurried fatall to unforeseen consequences. Here indeed we live se vilely, menially, mechanically; and we so live as muc when forces blindly lead to us ends that are liked as whe we are caught in conditions and ends against which w blindly rebel. To call satisfactions which happen in th blind way "ends" in a eulogistic sense, as did class thought, is to proclaim in effect our servile submission t accident. We may indeed enjoy the goods the gods of fo tune send us, but we should recognize them for what the are, not asserting them to be good and righteous *alt gether*. For, since they have not been achieved by an art involving deliberate selection and arrangement forces, we do not know with what they are charged. It is an old true tale that the god of fortune is capriciou and delights to destroy his darlings after having mad them drunk with prosperity. The goods of art are no the less good in their goodness than the gifts of natur while in addition they are such as to bring with themselv open-eyed confidence. They are fruits of means con sciously employed; fulfillments whose further consequenc are secured by conscious control of the causal condition which enter into them. Art is the sole alternative t luck; and divorce from each other of the meaning an value of instrumentalities and ends is the essence of luc The esoteric character of culture and the supernatur quality of religion are both expressions of the divorce.

The modern mind has formally abjured belief in natural eleology because it found Greek and medieval teleol- ogy juvenile and superstitious. Yet facts have a way of compelling recognition of themselves. There is little scientific writing which does not introduce at some point or other the idea of tendency. The idea of tendency unites in itself exclusion of prior design and inclusion of movement in a particular direction, a direction that may be either furthered or counteracted and frustrated, but which is intrinsic. Direction involves a limiting position, a point or goal of culminating stoppage, as well as an initial starting point. To assert a tendency and to be fore-conscious of a possible terminus of movement are two names of the same fact. Such a consciousness may be fatalistic; a sense of inevitable march toward impend- ing doom. But it may also contain a perception of mean- ings such as flexibly directs a forward movement. The end is then an end-in-view and is in constant and cumu- lative reënactment at each stage of forward movement. It is no longer a terminal point, external to the conditions that have led up to it; it is the continually developing meaning of present tendencies—the very things which as directed we call "means." The process is art and its product, no matter at what stage it be taken, is a work of art.

To a person building a house, the end-in-view is not just a remote and final goal to be hit upon after a suffi- ciently great number of coerced motions have been duly performed. The end-in-view is a plan which is *contem- poraneously* operative in selecting and arranging materials. The latter, brick, stone, wood and mortar, are means only as the end-in-view is actually incarnate in them, in form-

ing them. Literally, they *are* the end in its present stag of realization. The end-in-view is present at each stag of the process; it is present as the *meaning* of the materia used and acts done; without its informing presence, th latter are in no sense "means;" they are merely extrinsi causal conditions. The statement is generic; it applie equally at every stage. The house itself, when buildin is complete, is "end" in no exclusive sense. It marks th conclusion of the organization of certain materials an events into effective means; but these material and event still exist in causal interaction with other things. Ne consequences are foreseen; new purposes, ends-in-view, ar entertained; they are embodied in the coördination of th thing built, now reduced to material, although significan material, along with other materials, and thus transmute into means. The case is still clearer, when instead c considering a process subject to as many rigid externa conditions as is the building of a house, we take for illus tration a flexibly and freely moving process, such as pain ing a picture or thinking out a scientific process, whe these operations are carried on artistically. Every proces of free art proves that the difference between means an end is analytic, formal, not material and chronologic.

What has been said enables us to re-define the distinc tion drawn between the artistic, as objectively productiv and the esthetic. Both involve a perception of meaning in which the instrumental and the consummatory pecu liarly intersect. In esthetic perceptions an object inte penetrated with meanings is given; it may be taken fo granted; it invites and awaits the act of appropriativ enjoyment. In the esthetic object tendencies are sense as brought to fruition; in it is embodied a means-consequenc

elationship, as the past work of his hands was surveyed
y the Lord and pronounced good. This good differs
rom those gratifications to which the name sensual
ather than sensuous is given, since the former are pleas-
ng endings that occur in ways not informed with the
neaning of materials and acts integrated into them.
n appreciative possession, perception goes out to tendencies
vhich *have* been brought to happy fruition in such a way
s to release and arouse.

Artistic sense on the other hand grasps tendencies as
ossibilities; the invitation of these possibilities to per-
eption is more urgent and compelling than that of the
iven already achieved. While the means-consequence
elationship is directly sensed, felt, in both appreciation
nd artistic production, in the former the scale descends
pon the side of the attained; in the latter there pre-
lominates the invitation of an existent consummation
o bring into existence further perceptions. Art in being,
he active productive process, may thus be defined as an
sthetic perception together with an *operative* perception
f the efficiencies of the esthetic object. In many persons
vith respect to most kinds of enjoyed perceptions, the
ense of possibilities, the arousal or excitation attendant
pon appreciation of poetry, music, painting, architecture
r landscape remains diffuse and inchoate; it takes effect
nly in direct and undefined channels. The enjoyed
erception of a visual scene is in any case a function
f that scene in its total connections, but it does not link
p adequately. In some happily constituted persons,
his effect is adequately coördinated with other endow-
nents and habits; it becomes an integral part of craft,
aking effect in the creation of a new object of apprecia-

tion. The integration is, however, progressive and e
perimental, not momentarily accomplished. Thus eve
creative effort is temporal, subject to risk and deflectio
In that sense the difference between the diffuse and pos
poned change of action due in an ordinary person
release of energies by an esthetic object, and the speci
and axial direction of subsequent action in a gifted perso
is, after all, a matter of degree.

Without a sense of moving tendencies which are oper
tive in conjunction with a state of fruition, there
appetitive gratification, but nothing that may be terme
appreciation. Sense of moving tendencies suppli
thrill, stimulation, excitation; sense of completion, co
summation, affords composure, form, measure, compos
tion. Emphasize the latter, and appreciation is of t
classic type. This type fits conditions where productio
is professionalized among technical craftsmen, as amo
the Greeks; it is adapted to a contemplative enjoyment
the achievements of past ages or remote places, whe
conditions forbid urge to emulation or productive acti
ity of a similar kind. Any work of art that persistent
retains its power to generate enjoyed perception
appreciation becomes in time classic.

In so-called romantic art, the sense of tendencies oper
tive beyond the limits of consummation is in exces
a lively sense of unrealized potentialities attaches to t
object; but it is employed to enhance immediate appr
ciation, not to promote further productive achievemer
Whatever is peculiarly romantic excites a feeling that t
possibilities suggested go beyond not merely actual pre
ent realization, but are beyond effective attainment
any experience. In so far intentionally romantic art

vilful, and in so far not art. Excited and uneasy percep-
ual enjoyment is made ultimate, and the work of art is
ccommodated to production of these feelings. The sense
f unachieved possibilities is employed as a compensatory
quivalent for endeavor in achievement. Thus when
he romantic spirit invades philosophy the possibilities
resent in imaginative sentiment are declared to be the
eal, although "transcendental," substance of Being itself.
n complete art, appreciation follows the object and
noves with it to its completion; romanticism reverses the
rocess and degrades the object to an occasion for arous-
ng a predetermined type of appreciation. In classicism,
bjective achievement is primary, and appreciation not
nly conforms to the object, but the object is employed to
ompose sentiment and give it distinction. Its vice,
s an 'ism, is that it turns the mind to what is given;
he given is taken as if it were eternal and wholly separate
rom generation and movement. Art free from subjec-
ion to any "ism" has movement, creation, as well as
rder, finality.

To institute a difference of *kind* between useful and fine
rts is, therefore, absurd, since art involves a peculiar
nterpenetration of means and ends. Many things are
ermed useful for reasons of social status, implying dep-
ecation and contempt. Things are sometimes said to
elong to the menial arts merely because they are cheap
nd used familiarly by common people. These things
f daily use for ordinary ends may survive in later periods,
r be transported to another culture, as from Japan and
China to America, and being rare and sought by con-
oisseurs, rank forthwith as works of fine art. Other
hings may be called fine because their manner of use is

decorative or socially ostentatious. It is tempting
make a distinction of degree and say that a thing belon
to the sphere of use when perception of its meaning
incidental to something else; and that a thing belongs
fine art when its other uses are subordinate to its use
perception. The distinction has a rough practical valu
but cannot be pressed too far. For in production of
painting or a poem, as well as in making a vase or a ter
ple, a perception is also employed as means for somethi
beyond itself. Moreover, the perception of urns, po
and pans as commodities may be intrinsically enjoyabl
although these things are primarily perceived with refe
ence to some use to which they are put. The only *bas*
distinction is that between bad art and good art, a
this distinction, between things that meet the requir
ments of art and those that do not, applies equally
things of use and of beauty. Capacity to offer to pe
ception meaning in which fruition and efficacy interpen
trate is met by different products in various degrees
fulness; it may be missed altogether by pans and poem
alike. The difference between the ugliness of a mechan
cally conceived and executed utensil and of a meretricio
and pretentious painting is one only of content or materia
in form, both are articles, and bad articles.

Thinking is pre-eminently an art; knowledge and prop
sitions which are the products of thinking, are works
art, as much so as statuary and symphonies. Eve
successive stage of thinking is a conclusion in which th
meaning of what has produced it is condensed; and it
no sooner stated than it is a light radiating to other thin
—unless it be a fog which obscures them. The antece
ents of a conclusion are as causal and existential as tho

of a building. They are not logical or dialectical, or an affair of ideas. While a conclusion follows from antecedents, it does not follow from "premises," in the strict, formal sense. Premises are the analysis of a conclusion into its logically justifying grounds; there are no premises till there is a conclusion. Conclusion and premise are reached by a procedure comparable to the use of boards and nails in making a box; or of paint and canvas in making a picture. If defective materials are employed or if they are put together carelessly and awkwardly, the result is defective. In some cases the result is called unworthy, in others, ugly; in others, inept; in others, wasteful, inefficient, and in still others untrue, false. But in each case, the condemnatory adjective refers to the resulting work judged in the light of its method of production. Scientific method or the art of constructing true perceptions is ascertained in the course of experience to occupy a privileged position in undertaking other arts. But this unique position only places it the more securely as an art; it does not set its product, knowledge, apart from other works of art.

The existential origin of valid cognitive perceptions is sometimes recognized in form and denied in substance; the name "psychological" is given to the events which generate valid beliefs. Then a sharp distinction is made between genesis as psychological and validity as logical. Of course lexicographic names are of no special moment; if any one wishes to call the efficient causes of knowledge and truth psychological, he is entitled to do so—provided the actual traits of these causative events are recognized. Such a recognition will note however that psychological does not mean psychic, or refer to events going on exclu-

sively within the head or "subcutaneously." To becom
aware of an object cognitively as distinct from esthet
ically, involves external physical movements and externa
physical appliances physically manipulated. Some o
these active changes result in unsound and defective per
ceptions; some have been ascertained to result usually i
valid perceptions. The difference is precisely that whic
takes place when the art of architecture or sculpture i
skilfully conducted or is carried on carelessly, and withou
adequate appliances. Sometimes the operations pro
ductive of tested beliefs are called "inductive;" with a
implication in the naming, of discrediting them, as com
pared with deductive functions, which are assigned
superior exclusive status. Of deduction, when thus de
fined, the following assertions may be made. First, i
has nothing to do with truth about any matter of exist
ence. Secondly, it is not even concerned with consistenc
or correctness, save in a formal sense whose opposite (a
has been previously pointed out) is not inconsistenc
but nonsense. Thirdly, the meanings which figure in i
are the conclusions of prior inquiries which are "induc
tive," that is, are products of an experimental art o
changing external things by appropriate external move
ments and appliances.

Deduction as it actually occurs in science is *not* deduc
tion as deduction should be according to a common defini
tion. Deduction deals directly with meanings in thei
relations to one another, rather than with meaning
directly referred to existence. But these meanings ar
what they are in themselves and are related to one an
other by means of acts of taking and manipulating—
an art of discourse. They possess intellectual impor

and enter fruitfully into scientific method only because they are selected, employed, separated and combined by acts extraneous to them, acts which are as existential and causative as those concerned in the experimental use of apparatus and other physical things. The *act* of knowing, whether solicitous about inference or about demonstration, is always inductive. There is only one mode of thinking, the inductive, when thinking denotes anything that actually happens. The notion that there is another kind called deduction is another evidence of the prevalent tendency in philosophy to treat functions as antecedent operations, and to take essential meanings *of* existence as if they were a kind of Being. As a concrete operation, deduction is generative, not sterile; but as a concrete operation, it contains an extraneous act of taking and using which is selective, experimental and checked constantly by consequences.

Knowledge or science, as a work of art, like any other work of art, confers upon things traits and potentialities which did not *previously* belong to them. Objection from the side of alleged realism to this statement springs from a confusion of tenses. Knowledge is not a distortion or perversion which confers upon *its* subject-matter traits which *do* not belong to it, but is an act which confers upon non-cognitive material traits which *did* not belong to it. It marks a change by which physical events exhibiting properties of mechanical energy, connected by relations of push and pull, hitting, rebounding, splitting and consolidating, realize characters, meanings and relations of meanings *hitherto* not possessed by them. Architecture does not add to stone and wood something which does not belong to them, but it does add to them

properties and efficacies which they did not possess i
their earlier state. It adds them by means of engagin
them in new modes of interaction, having a new order o
consequences. Neither engineering nor fine art limit
itself to imitative reproduction or copying of anteceden
conditions. Their products may nevertheless be mor
effectively natural, more "life like," than were anteced
ent states of natural existence. So it is with the art o
knowing and its works.

The failure to recognize that knowledge is a product o
art accounts for an otherwise inexplicable fact: tha
science lies today like an incubus upon such a wide are
of beliefs and aspirations. To remove the deadweight
however, recognition that it is an art will have to be mor
than a theoretical avowal that science is made by ma
for man, although such recognition is probably an initia
preliminary step. But the real source of the difficulty i
that the art of knowing is limited to such a narrow area
Like everything precious and scarce, it has been artif
cially protected; and through this very protection it ha
been dehumanized and appropriated by a class. A
costly jewels of jade and pearl belong only to a few, s
with the jewels of science. The philosophic theorie
which have set science on an altar in a temple remote fro
the arts of life, to be approached only with peculiar rite
are a part of the technique of retaining a secluded mo
nopoly of belief and intellectual authority. Till the art o
achieving adequate and liberal perceptions of the mean
ings of events is incarnate in education, morals an
industry, science will remain a special luxury for a few
for the mass, it will consist of a remote and abstruse bod
of curious propositions having little to do with life, excep

where it lays the heavy hand of law upon spontaneity, and invokes necessity and mechanism to witness against generous and free aspiration.

Every error is attended with a contrary and compensatory error, for otherwise it would soon be self-revealing. The conception that causes are metaphysically superior to effects is compensated for by the conception that ends are superior esthetically and morally to means. The two beliefs can be maintained together only by removing "ends" out of the region of the causal and efficacious. This is accomplished nowadays by first calling ends intrinsic values, and then by making a gulf between value and existence. The consequence is that science, dealing as it must, with existence, becomes brutal and mechanical, while criticism of values, whether moral or esthetic, becomes pedantic or effeminate, expressing either personal likes and dislikes, or building up a cumbrous array of rules and authorities. The thing that is needful, discriminating judgment by methods whose consequences improve the art, easily slips through such coarse meshes, and by far the greater part of life goes on in a darkness unillumined by thoughtful inquiry. As long as such a state of thing persists, the argument of this chapter that science is art—like many other propositions of this book—is largely prophetic, or more or less dialectical. When an art of thinking as appropriate to human and social affairs has grown up as that used in dealing with distant stars, it will not be necessary to argue that science is one among the arts and among the works of art. It will be enough to point to observable situations. The separation of science from art, and the division of arts into those concerned with mere means and those concerned with ends in themselves,

is a mask for lack of conjunction between power and the goods of life. It will lose plausibility in the degree in which foresight of good informs the display of power.

Evidence of the interpenetration of the efficacious with the final in art is found in the slow emancipation of art from magical rite and cult, and the emergence of science from superstition. For magic and superstition could never have dominated human culture, nor poetry have been treated as insight into natural causes, if means and ends were empirically marked off from each other. The intimacy of their union in one and the same object is that which makes it easy to impute to whatever is consummatory a kind of efficacy which it does not possess. Whatever is final is important; to say this is to enunciate a truism. Lack of instrumentalities and of skill by which to analyze and follow the particular efficacies of the immediately enjoyed object lead to imputation to it of wholesale efficacy in the degree of its importance. To the short-cut pragmatism congenial to natural man, importance measures "reality" and reality in turn defines efficacious power. Loyalties evoked in the passionate citizen by sight of the flag or in the devout Christian by the cross are attributed directly to the intrinsic nature of these objects. Their share in a consummatory experience is translated into a mysterious inner sacred power, an indwelling efficacy. Thus a souvenir of the beloved one, arousing in the lover enjoyment similar to that awakened by the precious one to whom it belonged, possesses delightful, exciting, and consoling efficacies. No matter what things are directly implicated in a consummatory situation, they gain potencies for weal or woe similar to the good or evil which directly marks the situa-

tion. Obviously error here resides in the gross and undiscriminating way in which power is attributed; inquiry to reveal the specified elements which form the sequential order is lacking.

It is a commonplace of anthropologists that for the most part clothing originated in situations of unusual awe or prestigious display, rather than as a utility or protection. It was part of a consummatory object, rather than a means to specified consequences. Like the robes of priests, clothes were vestments, and investiture was believed to convey directly to the one ceremonially garbed dread potency or fascinating charm. Clothes were worn to confer authority; a man did not lend his significance to them. Similarly, a victorious hunter and warrior celebrated a triumphant return to camp by affixing to his person in conspicuous fashion claws and teeth of the wild beast or enemy that his prowess had subjugated. These signal proofs of power were integral portions of the object of admiration, loyalty and reverence. Thus the trophy became an emblem, and the emblem was endowed with mystic force. From a sign of glory it became a cause of glorification, and even when worn by another aroused the acclaim due to a hero. In time such trophies became the documented seal of prestigious authority. They had an intrinsic causal potency of their own. Legal history is full of like instances. Acts originally performed in connection with, say, the exchange of property, performed as part of the dramatic ceremony of taking possession of land, were not treated as mere evidences of title, but as having a mystic power to confer title.

Later, when such things lose their original power and become "mere matters of form," they may still be essen-

tial to the legal force of a transaction, as seals have had to be affixed to a contract to give it force, even though there was no longer sense or reason in their use. Things which have an efficacy imputed to them simply because they have shared in some eminent consummatory experience are symbols. They are called symbols, however, only afterwards and from without. To the devout in politics and religion they are other than symbols; they are articles possessed of occult potency. To one man, two crossed lines are an indication of an arithmetical operation to be performed; to another, they are evidence of the existence of Christianity as a historic fact, as a crescent is a reminder of the existence of Islam. But to another, a cross is more than a poignant reminder of a tragically significant death; it has intrinsic sacred power to protect and to bless. Since a flag stirs passionate loyalty to sudden and pervasive ebullition, the flag must have properties and potencies not possessed by other and differently configured pieces of cloth; it must be handled with reverence; it is the natural object of ceremonial adoration.

Phenomena like these when manifested in primitive culture are often interpreted as if they were attempts at a causal explanation of natural occurrences; magic is said to be science gone wrong. In reality, they are facts of direct emotional and practical response; beliefs, ideas, interpretations, only come later when responses not being direct and inevitably appropriate seem to demand explanation. As immediate responses they exemplify the fact that anything involved, no matter how incidentally, in a consummatory situation has the power of arousing the awe, excitement, relief, admiration belonging to

he situation as a whole. Industry displaces magic, and cience reduces myth, when the elements that enter into he constitution of the consummatory whole are discrimi- nated, and each one has its own particular place in sequen- ial order assigned it. Thus materials and efficacies haracteristic of different kinds of arts are distinguished. But because the ceremonial, literary and poetic arts ave quite other ways of working and other consequences, han industrial and scientific arts, it is far from following, s current theories assume, that they have no instrumen- al power at all, or that a sense of their instrumental gency is not involved in their appreciative perception. The pervasive operation of symbolism in human culture s all the proof that is needed to show that an intimate and lirect sense of place and connection in a prolonged history nters into the enjoyed and suffered constituents of the istory, and especially into the final or terminal members.

Further confirmation of this proposition is found in lassic philosophy itself, in its theory that essential forms "make" things *what* they are, even though not causing hem to occur. "Essence," as it figures in Greek theory, epresents the mysterious potency of earlier "symbols" mancipated from their superstitious context and envisaged n a dialectic and reflective context. The essences of Greek-medieval science were in short poetic objects, reated as objects of demonstrative science, used to explain nd understand the inner and ultimate constitution of hings. While Greek thought was sufficiently emanci- ated from magic to deny "efficient" causality to formal nd final essences, yet the latter were conceived of as naking particular things to be *what* they are, members of natural kinds. Moreover, by a reversal of causal resi-

dence, intrinsic seeking for such forms was imputed to changing events. Thus the ground was prepared for the later frank return of patristic and scholastic thought to a frank animistic supernaturalism. The philosophic theory erred, as did magic and myth, regarding the nature of the efficacy involved in ends; and the error was due to the same causes, namely, failure of analysis into elements. It could not have occurred, were there that sharp division between means and ends, fruitions and instrumentalities, assumed by current thought.

In short, the history of human experience is a history of the development of arts. The history of science in its distinct emergence from religious, ceremonial and poetic arts is the record of a differentiation of arts, not a record of separation from art. The chief significance of the account just given, lies, for our present purpose, in its bearing upon the theory of experience and nature. It is not, however, without import for a theory of criticism. The present confusion, deemed chaos by some, in the fine arts and esthetic criticism seems to be an inevitable consequence of the underlying, even if unavowed, separation of the instrumental and the consummatory. The further men go in the concrete the more they are forced to recognize the logical consequence of their controlling assumptions. We owe it to theories of art prevalent to-day in one school of critics that certain implications, long obscured, of the traditional theory of art and nature have been brought to light. Gratitude for this debt should not be stinted because the adherents of the traditional theory regarding the newer views as capricious heresies, wild aberrations. For these critics, in proclaiming that esthetic qualities in works of fine art are

unique, in asserting their separation from not only every thing that is existential in nature but also from all other forms of good, in proclaiming that such arts as music, poetry, painting have characters unshared with any natural things whatsoever:—in asserting such things the critics carry to its conclusion the isolation of fine art from the useful, of the final from efficacious. They thus prove that the separation of the consummation from the instrumental makes art wholly esoteric.

There are substantially but two alternatives. Either art is a continuation, by means of intelligent selection and arrangement, of natural tendencies of natural events; or art is a peculiar addition to nature springing from something dwelling exclusively within the breast of man, whatever name be given the latter. In the former case, delightfully enhanced perception or esthetic appreciation is of the same nature as enjoyment of any object that is consummatory. It is the outcome of a skilled and intelligent art of dealing with natural things for the sake of intensifying, purifying, prolonging and deepening the satisfactions which they spontaneously afford. That, in this process, new meanings develop, and that these afford uniquely new traits and modes of enjoyment is but what happens everywhere in emergent growths.

But if fine art has nothing to do with other activities and products, then of course it has nothing inherently to do with the objects, physical and social, experienced in other situations. It has an occult source and an esoteric character. It makes little difference what the source and the character be called. By strict logic it makes literally no difference. For if the quality of the esthetic experience is by conception unique, then the words

employed to describe it have no significance deriv from or comparable to the qualities of other experienc their signification is hidden and specialized to a degr Consider some of the terms which are in more or less cu rent use among the critics who carry the isolation of a and the esthetic to its limit. It is sometimes said th art is the expression of the emotions; with the implicati that, because of this fact, subject-matter is of no signi cance except as material through which emotion is e pressed. Hence art becomes unique. For in works science, utility and morals the character of the objec forming this subject-matter is all-important. But i this definition, subject-matter is stripped of all its ov inherent characters in art in the degree in which it genuine art; since a truly artistic work is manifest in t reduction of subject-matter to a mere medium of expr sion of emotion.

In such a statement emotion either has no significan at all, and it is mere accident that this particular combin tion of letters is employed; or else, if by emotion is mea the same sort of thing that is called emotion in daily lif the statement is demonstrably false. For emotion in i ordinary sense is something called out *by* objects, physic and personal; it is response *to* an objective situation. is not something existing somewhere by itself which th employs material through which to express itself. Em tion is an indication of intimate participation, in a mo or less excited way in some scene of nature or life; it is, to speak, an attitude or disposition which is a functi of objective things. It is intelligible that art shou select and assemble objective things in such ways as evoke emotional response of a refined, sensitive and endu

ng kind; it is intelligible that the artist himself is one capable of sustaining these emotions, under whose temper and spirit he performs his compositions of objective materials. This procedure may indeed be carried to a point such that the use of objective materials is economized to the minimum, and the evocation of the emotional response carried to its relative maximum. But it still remains true that the origin of the art-process lay in emotional responses spontaneously called out by a situation occurring without any reference to art, and without "esthetic" quality save in the sense in which all immediate enjoyment and suffering is esthetic. Economy in use of objective subject-matter may with experienced and trained minds go so far that what is ordinarily called "representation" is much reduced. But what happens is a highly funded and generalized representation of the formal sources of ordinary emotional experience.

The same sort of remark is to be made concerning "significant form" as a definition of an esthetic object. Unless the meaning of the term is so isolated as to be wholly occult, it denotes a selection, for sake of emphasis, purity, subtlety, of those forms which give consummatory significance to every-day subject-matters of experience. "Forms" are not the peculiar property or creation of the esthetic and artistic; they are characters in virtue of which anything meets the requirements of an enjoyable perception. "Art" does not create the forms; it is their selection and organization in such ways as to enhance, prolong and purify the perceptual experience. It is not by accident that some objects and situations afford marked perceptual satisfactions; they do so because of their structural properties and relations. An artist may work

with a minimum of analytic recognition of these structur or "forms;" he may select them chiefly by a kind of symp thetic vibration. But they may also be discriminative ascertained; and an artist may utilize his delibera awareness of them to create works of art that are mo formal and abstract than those to which the public accustomed. Tendency to composition in terms of t formal characters marks much contemporary art, poetry, painting, music, even sculpture and architectu At their worst, these products are "scientific" rather th artistic; technical exercises, sterile and of a new kind pedantry. At their best, they assist in ushering in n modes of art and by education of the organs of percepti in new modes of consummatory objects; they enlarge a enrich the world of human vision.

Thus, by only a slight forcing of the argument, reach a conclusion regarding the relations of instrumen and fine art which is precisely the opposite of that intend by seclusive estheticians; namely, that fine art co sciously undertaken as such is peculiarly instrumental quality. It is a device in experimentation carried for the sake of education. It exists for the sake of specialized use, use being a new training of modes perception. The creators of such works of art are entitl when successful, to the gratitude that we give to invento of microscopes and microphones; in the end, they op new objects to be observed and enjoyed. This is genuine service; but only an age of combined confusi and conceit will arrogate to works that perform t special utility the exclusive name of fine art.

Experience in the form of art, when reflected upon, conclude by saying, solves more problems which ha

troubled philosophers and resolves more hard and fast dualisms than any other theme of thought. As the previous discussion has indicated, it demonstrates the intersection in nature of individual and generic; of chance and law, transforming one into opportunity and the other into liberation; of instrumental and final. More evidently still, it demonstrates the gratuitous falsity of notions that divide overt and executive activity from thought and feeling and thus separate mind and matter. In creative production, the external and physical world is more than a mere means or external condition of perceptions, ideas and emotions; it is subject-matter and sustainer of conscious activity; and thereby exhibits, so that he who runs may read, the fact that consciousness is not a separate realm of being, but is the manifest quality of existence when nature is most free and most active.

CHAPTER TEN

Existence, Value and Criticism

Recent philosophy has witnessed the rise of a theory o
value. Value as it usually figures in this discussio
marks a desperate attempt to combine the obvious empir
cal fact that objects are qualified with good and bad
with philosophic deliverances which, in isolating man fro
nature, qualitative individualities from the world, rende
this fact anomalous. The philosopher erects a "realm
of values" in which to place all the precious thing
which are extruded from natural existence because o
isolations artificially introduced. Poignancy, humor, zest
tragedy, beauty, prosperity and bafflement, althoug
rejected from a nature which is identified with mechanica
structure, remain just what they empirically are, an
demand recognition. Hence they are gathered up int
the realm of values, contradistinguished from the realm
of existence. Then the philosopher has a new problem
with which to wrestle: What is the relationship of thes
two "worlds?" Is the world of value that of ultimat
and transcendent Being from which the world of existenc
is a derivation or a fall? Or is it but a manifestation o
human subjectivity, a factor somehow miraculously super
vening upon an order complete and closed in physica
structure? Or are there scattered at random throug
objective being, detached subsistences as "real" as an
physical events, but having no temporal dates and spa
tial locations, and yet at times and places miraculously
united with existences?

Choice among such notions of value is arbitrary, because the problem is arbitrary. When we return to the conceptions of potentiality and actuality, contingency and regularity, qualitatively diverse individuality, with which Greek thought operated, we find no room for a theory of values separate from a theory of nature. Yet if we are to recur to the Greek conceptions, the return must be a return with a difference. It must surrender the identification of natural ends with good and perfection; recognizing that a natural end, a part from endeavor expressing choice, has no intrinsic eulogistic quality, but is the boundary which writes "Finis" to a chapter of history inscribed by a moving system of energies. Failure by exhaustion as well as by triumph may constitute an end; death, ignorance, as well as life, are finalities.

Again, the return must abandon the notion of a predetermined limited number of ends inherently arranged in an order of increasing comprehensiveness and finality. It will have to recognize that natural termini are as infinitely numerous and varied as are the individual systems of action they delimit; and that since there is only relative, not absolute, impermeability and fixity of structure, new individuals with novel ends emerge in irregular procession. It must recognize that limits, closures, ends are experimentally or dynamically determined, presenting, like the boundaries of political individuals or states, a moving adjustment of various energy-systems in their cooperative and competitive interactions, not something belonging to them of their own right. Consequently, it will surrender the separation in nature from each other of contingency and regularity, the hazardous and the assured; it will avoid that relegation of them to distinct

orders of Being which is characteristic of the classic tradi tion. It will note that they intersect everywhere; that i is uncertainty and indeterminateness that create the nee for and the sense of order and security; that whatever i most complete and liberal in being and possession is fo that very reason most exposed to vicissitude, and mos needful of watchful safeguarding art.

The connotation of "value" in recent thought contain some hint of the changes which experience has compelle in the classic notion of natural ends. For by implica tion at least values are recognized to be fugitive and pre carious, to be negative and positive, and indefinitel diversified in quality. Even that metaphysical theory c super-idealism which finds them to be eternal, and th eternal foundation and source of shifting temporal event bases its argument upon the undeniable insecurity, th interminable elusiveness, the appearance and disappear ance, of values in actual experience. Because of thi sense of the evanescence and uncertainty of what used t be called ends but are now called values, the importan consideration and concern is not a theory of values bu a theory of criticism; a method of discriminating amon goods on the basis of the conditions of their appearanc and of their consequences.

Values are values, things immediately having certai intrinsic qualities. Of them as values there is accordingl nothing to be said; they are what they are. All that ca be said of them concerns their generative conditions an the consequences to which they give rise. The notio that things as direct values lend themselves to though and discourse rests upon a confusion of causal categorie with immediate qualities. Objects, for example, ma

be distinguished as contributory or as fulfilling, but this is distinction of place with respect to causal relationship; it is not a distinction of values. We may be interested in a thing, be concerned with it or like it, for a reason. The reason for appreciation, for an enjoyed appropriation, is often that the object in question serves as a means to something; or the reason is that it stands as the culmination of an antecedent process. But to take into account the reason for liking and enjoyment concerns the cause of the existence of a value, and has nothing to do with the intrinsicalness or nature of the value-quality, which either does or does not exist. Things that are means and things that are fulfillments have different qualities; but so do symphonies, operas and oratorios among themselves. The difference is not one that has anything to do with the immediacy or intrinsicalness of value-quality; it is a difference between one affair and quality and another.

It is self-contradictory to suppose that when a fulfillment possesses immediate value, its means of attainment do not. The person to whom the cessation of a tooth-ache has value, by that very fact finds value in going to a dentist, or in whatever else is means of fulfillment. For fulfillment is as relative to means as means are to realization. Means-consequences constitute a single undivided situation. Consequently when thought and discussion enter, when theorizing sets in, when there is anything beyond bare immediate enjoyment and suffering, it is the means-consequence relationship that is considered. Thought goes beyond immediate existence to its relationships, the conditions which mediate it and the things to which it is in turn mediatory. And such a procedure is criticism. The all but universal confusion

in theories of value of determined position in causative or sequential relationship with value proper is indirect testimony to the fact that every intelligent appreciation is also criticism, judgment, of the thing having immediate value. Any *theory* of values is perforce entrance into the field of criticism. Value as such, even things having value, cannot in their immediate existence be reflected upon; they either are or are not; are or are not enjoyed. To pass beyond direct occurrence, even though the passage be restricted to an attempt to define value, is to begin a process of discrimination which implies a reflective criterion. In themselves, values may be just pointed at; to attempt a definition by complete pointing is however bootless. Sooner or later, with respect to positive or negative value, designation will have to include everything.

These remarks are preparatory to presenting a conception of philosophy; namely, that philosophy is inherently criticism, having its distinctive position among various modes of criticism in its generality; a criticism of criticisms, as it were. Criticism is discriminating judgment, careful appraisal, and judgment is appropriately termed criticism wherever the subject-matter of discrimination concerns goods or values. Possession and enjoyment of goods passes insensibly and inevitably into appraisal. First and immature experience is content simply to enjoy. But a brief course in experience enforces reflection; it requires but brief time to teach that some things sweet in the having are bitter in after-taste and in what they lead to. Primitive innocence does not last. Enjoyment ceases to be a datum and becomes a problem. As a problem, it implies intelligent inquiry into the conditions

and consequences of a value-object; that is, criticism. If values were as plentiful as huckleberries, and if the huckleberry-patch were always at hand, the passage of appreciation into criticism would be a senseless procedure. If one thing tired or bored us, we should have only to turn to another. But values are as unstable as the forms of clouds. The things that possess them are exposed to all the contingencies of existence, and they are indifferent to our likings and tastes.

Good things change and vanish not only with changes in the environing medium but with changes in ourselves. Continued perception, except when it has been cultivated through prior criticism, dulls itself; it is soon satiated, exhausted, blasè. The infinite flippancy of the natural man is a standing theme for discourse by shrewd observers of human nature. Cultivated taste alone is capable of prolonged appreciation of the same object; and it is capable of it because it has been trained to a discriminating procedure which constantly uncovers in the object new meanings to be perceived and enjoyed. Add to exhaustion of the organs of perception and enjoyment, all the other organic causes which render enjoyed objects unstable, and then add the external vicissitudes to which they are subjected, and there is no cause to wonder at the evanescence of immediate goods; nor at the so-called paradoxes of pleasure and virtue, according to which they are not secured by aiming at them but by attention to other things;—a fact however, which is not a paradox in a world where nothing is attained in any other way than by attention to its causal conditions.

When criticism and the critical attitude are legitimately distinguished from appreciation and taste, we are in the

presence of one case of the constant rhythm of "perchings and flights" (to borrow James' terms), characteristic of alternate emphasis upon the immediate and mediate, the consummatory and instrumental, phases of all conscious experience. If we are misled into ignoring the omnipresence in all observations and ideas of this rhythm, it is largely because, under the influence of formal theories, we attach too elaborate and too remote a signification to "appreciation" and "criticism." Values of some sort or other are not traits of rare and festal occasions; they occur whenever any object is welcomed and lingered over; whenever it arouses aversion and protest; even though the lingering be but momentary and the aversion a passing glance toward something else.

Similarly, criticism is not a matter of formal treatises, published articles, or taking up important matters for consideration in a serious way. It occurs whenever a moment is devoted to looking to see what sort of value is present; whenever instead of accepting a value-object wholeheartedly, being rapt by it, we raise even a shadow of a question about its worth, or modify our sense of it by even a passing estimate of its probable future. It is well upon the whole that we use the terms "appreciation" and "criticism" honorifically, to designate conspicuous instances. But it is fatal to any understanding of them to fail to note that formally emphatic instances are of exactly the same nature as the rhythmic alternation between slight agreeable acceptances, annoyed rejections and passing questionings and estimates, which make up the entire course of our waking experience, whether in revery, in controlled inquiry or in deliberate management of affairs.

The rhythmic succession of the two modes of perception suggests that the difference is one of emphasis, or degree. Critical appreciation, and appreciative, warmly emotionalized criticism occur in every matured sane experience. After the first dumb, formless experience of a thing as a good, subsequent perception of the good contains at least a germ of critical reflection. For this reason, and only for this reason, elaborate and formulated criticism is subsequently possible. The latter, if just and pertinent, can but develop the reflective implications found within appreciation itself. Criticism would be the most wilful of undertakings if the possession and enjoyment of good objects had no element of memory and foresight in it; if it lacked all circumspection and judgment. Criticism is reasonable and to the point, in the degree in which it extends and deepens these factors of intelligence found in immediate taste and enjoyment.

Conscience in morals, taste in fine arts and conviction in beliefs pass insensibly into critical judgments; the latter pass also into a more and more generalized form of criticism called philosophy. How is the assertion of "canons" of taste and criticism compatible with the declaration that there is no discussing tastes? What is meant by a distinction between apparent good and real good? How can the distinction between seeming and being be capable of application to what is good? Is critical appraisal possible without a standard measure of values? Is the standard of values itself a value? Is it derived from the value-objects to which it is applied? If so, what authority does it possess over and beyond that of particular cases? What right has it to pass judgment upon its own source and authors? Does a standard

exist transcendentally in independence of concrete cases judged? If so, what is its source, and what is the ground and guarantee of its applicability to alien material? Is taste, immediate appreciation, sense and moral sense ultimate, its own final judge in every case as it arises? What, in that event, saves us from chaotic anarchy? Is there among men a common measure of value? If so is it grounded outside of man, in an independent objective form of Being?

Such questions as these, which may be multiplied as one pleases, indicate that no great difficulty would attend an effort to derive all the stock issues of philosophy from the problems of value and their relationship to critical judgment. Whether it be a question of the good and bad in conviction and opinion, or in matters of conduct, or in appreciated scenes of nature and art, there occurs in every instance a conflict between the immediate value-object and the ulterior value-object: the given good, and that reached and justified by reflection; the now apparent and the eventual. In knowledge, for example there are beliefs *de facto* and beliefs *de jure*. In morals, there are immediate goods, the desired, and reasonable goods, the desirable. In esthetics, there are the goods of an undeveloped or perverted taste and there are the goods of cultivated taste. With respect to any of these distinctions, the true, real, final, or objective good is no *more* good as an immediate existence than is the contrasting good, called false, specious, illusory, showy, meretricious, *le faux bon*. The difference in adjectives designates a difference instituted in critical judgment; the validity of the difference between good which is approved and that which is good (immediately) but is *judged bad*, depends

therefore upon the value of reflection in general, and of a particular reflective operation in especial. Even if good of the reflective object is different from that of the good of the non-reflective object, it does not follow that it is a better good, much less that it is such a difference in goodness as makes the non-reflective good *bad:*—except upon one proviso, namely, that there is something unique in the value or goodness of reflection.

Either, then, the difference between genuine, valid, good and a counterfeit, specious good is unreal, or it is a difference consequent upon reflection, or criticism, and the significant point is that this difference is equivalent to that made by discovery of relationships, of conditions and consequences. With this conclusion are bound up two other propositions: Of immediate values as such, values which occur and which are possessed and enjoyed, there is no theory at all; they just occur, are enjoyed, possessed; and that is all. The moment we begin to discourse about these values, to define and generalize, to make distinctions in kinds, we are passing beyond value-objects themselves; we are entering, even if only blindly, upon an inquiry into causal antecedents and causative consequents, with a view to appraising the "real," that is the eventual, goodness of the thing in question. We are criticizing, not for its own sake, but for the sake of instituting and perpetuating more enduring and extensive values.

The other proposition is that philosophy is and can be nothing but this critical operation and function become aware of itself and its implications, pursued deliberately and systematically. It starts from actual situations of belief, conduct and appreciative perception which are characterized by immediate qualities of good and bad,

and from the modes of critical judgment current at an given time in all the regions of value; these are its data, it subject-matter. These values, criticisms, and critica methods, it subjects to further criticism as comprehen sive and consistent as possible. The function is to regulat the further appreciation of goods and bads; to give greate freedom and security in those acts of direct selection appropriation, identification and of rejection, elimination destruction which enstate and which exclude objects c belief, conduct and contemplation.

Such a conclusion wears an air of strangeness. I may appear to indicate an attempt by a dialectic tric to make the category of good-and-bad supreme in it jurisdiction over intellectual life and over all objects This impression will, I think, be readily dissipated b consideration of the actual meaning of what is said. Ob jects of belief and of refusals to believe are value-objects for each object is some thing acquiesced in, accepted adopted, appropriated. This is the same as saying it i found good or satisfactory to believe or disbelieve; truis tically, whatever is accepted is as such and in so fa good. There is no occult significance in this statement it is not preliminary to an argument which shall swee away the properties which objects possess independent c their being objects of belief, or of their being value It does not annihilate the difference among beliefs; i does not set up the *fact* that an object believed in is pe force found good as if it were a *reason* for belief. On th contrary: the statement is preliminary. The all-im portant matter is what lies back of and causes acceptanc and rejection; whether or no there is method of discrimina tion and assessment which makes a difference in what

ssented to and denied. Properties and relations that *ntitle* an object to be found good in belief are extraneous o the qualities that are its immediate good; they are ausal, and hence found only by search into the antecedent nd the eventual. The conception that there are some bjects or some properties of objects which carry their own dequate credentials upon their face is the snare and delu- ion of the whole historic tradition regarding knowledge, nfecting alike sensational and rational schools, objective ealisms and introspective idealisms.

Concerning beliefs and their objects taken in their mmediacy "*non-disputandum*" holds, as truly as it does oncerning tastes and their objects. If a man believes n ghosts, devils, miracles, fortune-tellers, the immutable ertainty of the existing economic regime, and the supreme nerits of his political party and its leaders, he does so elieve; these are immediate goods to him, precisely as ome color and tone combinations are lovely, or the mis- ress of his heart is charming. When the question is aised as to the "real" value of the object for belief, the ppeal is to criticism, intelligence. And the court of ppeal decides by the law of conditions and consequences. nquiry duly pursued leads to the enstatement of an bject which is directly accepted, good in belief, but an bject whose character now depends upon the reflective perations whose conclusion it is. Like the object of ogmatic and uncritical belief, it marks an "end," a static rrest; but unlike it, the "end" is a *conclusion;* hence it arries credentials.

Were not objects of belief immediate goods, false beliefs ould not be the dangerous things which they are. For is because these objects are good to believe, to admit and

assert, that they are cherished so intolerantly and unre
mittingly. Beliefs about God, Nature, society and ma
are precisely the things that men most cling to and mos
ardently fight for. It is easier to wean a miser from h
hoard, than a man from his deeper opinions. And th
tragedy is that in so many cases the *causes* which lead t
the thing in question being a value are not *reasons* for i
being a good, while the fact that it is an immediate goo
tends to preclude that search for causes, that dispassion
ate judgment, which is pre-requisite to the conversion
goods *de facto* into goods *de jure*. Here, again and pre
eminently, since reflection is the instrumentality of secu
ing freer and more enduring goods, reflection is a uniqu
intrinsic good. Its instrumental efficacy determines
to be a candidate for a distinctive position as an immediat
good, since beyond other goods it has power of reple
ishment and fructification. In it, apparent good and re
good enormously coincide.

In traditional discussion the fact is overlooked that th
subject-matter of belief is a good, since belief mean
assimilation and assertion. It is overlooked that its imm
diate goodness is both the obstacle to reflective examinatio
and the source of its necessity. The "true" is indeed s
up along with the good and the beautiful as a transcen
ent good, but the role of empirical good, of value, in th
sweep of ordinary beliefs is passed by. The counterpa
of this error, which isolates the subject-matter of intelle
from the scope of values and valuations, is a correspondi
isolation of the subject-matter of esthetic contemplatio
and immediate enjoyment from judgment. Betwee
these two realms, one of intellectual objects without valu
and the other of value-objects without intellect, there

an equivocal mid-country in which moral objects are placed, with rival claimants striving to annex them either to the region of purely immediate goods (in this case termed pleasures) or to that of purely rational objects. Hence the primary function of philosophy at present is to make it clear that there is no such difference as this division assumes between science, morals, and esthetic appreciation. All alike exhibit the difference between immediate goods casually occurring and immediate goods which have been reflectively determined by means of critical inquiry. If bare liking is an adequate determinant of values in one case, it is in the others. If intelligence, criticism, is required in one, it is in the others. If the end to be attained in any case is an enhanced and purified immediate appreciative, experienced object, so it is in the others. All cases manifest the same duality and present the same problem; that of embodying intelligence in action which shall convert casual natural goods, whose causes and effects are unknown, into goods valid for thought, right for conduct and cultivated for appreciation.

Philosophic discourse partakes both of scientific and literary discourse. Like literature, it is a comment on nature and life in the interest of a more intense and just appreciation of the meanings present in experience. Its business is reportorial and transcriptive only in the sense in which the drama and poetry have that office. Its primary concern is to clarify, liberate and extend the goods which inhere in the naturally generated functions of experience. It has no call to create a world of "reality' *de novo*, nor to delve into secrets of Being hidden from common-sense and science. It has no stock of information or body of knowledge peculiarly its own; if it does not

always become ridiculous when it sets up as a rival o science, it is only because a particular philosopher hap pens to be also, as a human being, a prophetic man o science. Its business is to accept and to utilize for a pu pose the best available knowledge of its own time an place. And this purpose is criticism of beliefs, institu tions, customs, policies with respect to their bearing upo good. This does not mean their bearing upon *the* good as something itself attained and formulated in philoso phy. For as philosophy has no private score of knowledg or of methods for attaining truth, so it has no privat access to good. As it accepts knowledge of facts an principles from those competent in inquiry and discovery so it accepts the goods that are diffused in human exper ence. It has no Mosaic nor Pauline authority of revela tion entrusted to it. But it has the authority of intell gence, of criticism of these common and natural goods

At this point, it departs from the arts of literary dis course. They have a freer office to perform—to perpetu ate, enhance and vivify in imagination the natural goods all things are forgiven to him who succeeds. But philo sophic criticism has a stricter task, with a greater measur of responsibility to what lies outside its own product It has to appraise values by taking cognizance of the causes and consequences; only by this straight and narro path may it contribute to expansion and emancipatio of values. For this reason the conclusions of scienc about matter-of-fact efficiencies of nature are its indis pensable instruments. If its eventual concern is t render goods more coherent, more secure and more signif cant in appreciation, its road is the subject-matter o natural existence as science discovers and depicts it.

Only in verbal form is there anything novel in this conception of philosophy. It is a version of the old saying that philosophy is love of wisdom, of wisdom which is not knowledge and which nevertheless cannot be without knowledge. The need of an organon of criticism which uses knowledge of relations among events to appraise the casual, immediate goods that obtain among men is not a fact of philosophy, but of nature and life. We can conceive a happier nature and experience than flourishes among us wherein the office of critical reflection would be carried on so continuously and in such detail that no particular apparatus would be needed. But actual experience is such a jumble that a degree of distance and detachment are a pre-requisite of vision in perspective. Thinkers often withdraw too far. But a withdrawal is necessary, unless they are to be deafened by the immediate clamor and blinded by the immediate glare of the scene. What especially makes necessary a generalized instrument of criticism, is the tendency of objects to seek rigid non-communicating compartments. It is natural that nature, variegatedly qualified, should exhibit various trends when it achieves experience of itself, so that there is a distribution of emphasis such as are designated by the adjectives scientific, industrial, political, religious, artistic, educational, moral and so on.

But however natural from the standpoint of causation may be the institutionalizing of these trends, their separation effects an isolation which is unnatural. Narrowness, superficiality, stagnation follow from lack of the nourishment which can be supplied only by generous and wide interactions. Goods isolated as professionalism and institutionalization isolate them, petrify; and in a moving

world solidification is always dangerous. Resistant force is gained by precipitation, but no one thing gets strong enough to defy everything. Over-specialization and division of interests, occupations and goods create the need for a generalized medium of intercommunication, or mutual criticism through all-around translation from one separated region of experience into another. Thus philosophy as a critical organ becomes in effect a messenger, a liason officer, making reciprocally intelligible voices speaking provincial tongues, and thereby enlarging as well as rectifying the meanings with which they are charged.

The difficulty is that philosophy, even when professing catholicity, has often been suborned. Instead of being a free messenger of communication it has been a diplomatic agent of some special and partial interest; insincere because in the name of peace it has fostered divisions that lead to strife, and in the name of loyalty has promoted unholy alliances and secret understandings. One might say that the profuseness of attestations to supreme devotion to truth on the part of philosophy is matter to arouse suspicion. For it has usually been a preliminary to the claim of being a peculiar organ of access to highest and ultimate truth. Such it is not; and it will not lose its esoteric and insincere air until the profession is disclaimed. Truth is a collection of truths; and these constituent truths are in the keeping of the best available methods of inquiry and testing as to matters-of-fact methods, which are, when collected under a single name, science. As to truth, then, philosophy has no pre-eminent status; it is a recipient, not a donor. But the realm of meanings is wider than that of true-and-false meanings; it is more urgent and more fertile. When the claim of

meanings to truth enter in, then truth is indeed pre-eminent. But this fact is often confused with the idea that truth has a claim to enter everywhere; that it has monopolistic jurisdiction. Poetic meanings, moral meanings, a large part of the goods of life are matters of richness and freedom of meanings, rather than of truth; a large part of our life is carried on in a realm of meanings to which truth and falsity as such are irrelevant. And the claim of philosophy to rival or displace science as a purveyor of truths seems to be mostly a compensatory gesture for failure to perform its proper task of liberating and clarifying meanings, including those scientifically authenticated. For, assuredly, a student prizes historic systems rather for the meanings and shades of meanings they have brought to light than for the store of ultimate truths they have ascertained. If accomplishment of the former office were made the avowed business of philosophy, instead of an incidental by-product, its position would be clearer, more intelligent and more respected.

It is sometimes suggested, however, that such a view of philosophy derogates from its dignity, degrading it into an instrument of social reforms, and that it is a view congenial only to those who are insensitive to the positive achievements of culture and over-sensitive to its evils. Such a conception overlooks outstanding facts. "Social reform" is conceived in a Philistine spirit, if it is taken to mean anything less than precisely the liberation and expansion of the meanings of which experience is capable. No doubt many schemes of social reform are guilty of precisely this narrowing. But for that very reason they are futile; they do not succeed in even the special reforms at which they aim, except at the expense of intensifying

other defects and creating new ones. Nothing but th best, the richest and fullest experience possible, is goo enough for man. The attainment of such an experience not to be conceived as the specific problem of "reformers but as the common purpose of men. The contributio which philosophy can make to this common aim is crit cism. Criticism certainly includes a heightened conscious ness of deficiencies and corruptions in the scheme an distribution of values that obtains at any period.

No just or pertinent criticism in its negative phase ca possibly be made however, except upon the basis of heightened appreciation of the positive goods whic human experience has achieved and offers. Positive con crete goods of science, art and social companionship ar the basic subject-matter of philosophy as criticism; an only because such positive goods already exist is the emancipation and secured extension the defining aim o intelligence. The more aware one is of the richness o meanings which experience possesses, the more will generous and catholic thinker be conscious of the limit which prevent sharing in them; the more aware will he b of their accidental and arbitrary distribution. If instru mental efficacies need to be emphasized, it is not for th sake of instruments but for the sake of that full and mor secure distribution of values which is impossible withou instrumentalities.

If philosophy be criticism, what is to be said of the rela tion of philosophy to metaphysics? For metaphysic as a statement of the generic traits manifested b existences of all kinds without regard to their differen tiation into physical and mental, seems to have nothin to do with criticism and choice, with an effective love o

visdom. It begins and ends with analysis and definition. When it has revealed the traits and characters that are sure to turn up in every universe of discourse, its work is done. So at least an argument may run. But the very nature of the traits discovered in every theme of discourse, since they are ineluctable traits of natural existence, forbids such a conclusion. Qualitative individuality and constant relations, contingency and need, movement and arrest are common traits of all existence. This fact is source both of values and of their precariousness; both of immediate possession which is casual and of reflection which is a precondition of secure attainment and appropriation. Any theory that detects and defines these traits is therefore but a ground-map of the province of criticism, establishing base lines to be employed in more intricate triangulations.

If the general traits of nature existed in water-tight compartments, it might be enough to sort out the objects and interests of experience among them. But they are actually so intimately intermixed that all important issues are concerned with their degrees and the ratios they sustain to one another. Barely to note and register that contingency is a trait of natural events has nothing to do with wisdom. To note, however, contingency in connection with a concrete situation of life is that fear of the Lord which is at least the beginning of wisdom. The detection and definition of nature's end is in itself barren. But the undergoing that actually goes on in the light of this discovery brings one close to supreme issues: life and death.

The more sure one is that the world which encompasses human life is of such and such a character (no matter

what his definition), the more one is committed to try
direct the conduct of life, that of others as well as of hir
self, upon the basis of the character assigned to the worl
And if he finds that he cannot succeed, that the attem
lands him in confusion, inconsistency and darknes
plunging others into discord and shutting them out fro
participation, rudimentary precepts instruct him to su
render his assurance as a delusion; and to revise h
notions of the nature of nature till he makes them mo
adequate to the concrete facts in which nature is en
bodied. Man needs the earth in order to walk, the se
to swim or sail, the air to fly. Of necessity he acts with
the world, and in order to be, he must in some measu
adapt himself as one part of nature to other parts.

In mind, thought, this situation, this predicamen
becomes aware of itself. Instead of the coerced adapt
tion of part to part with coerced failure or success as co
sequence, there is search for the meaning of things wit
respect to acts to be performed, plans and policies to b
formed; there is search for the meaning of proposed ac
with respect to objects they induce and preclude. Th
one cord that is never broken is that between the energi
and acts which compose nature. Knowledge modifi
the tie. But the idea that knowledge breaks the tie, tha
it inserts something opaque between the interactions
things, is hardly less than infantile. Knowledge
science modifies the particular interactions that com
within its reach, because it *is* itself a modification of inte
actions, due to taking into account their past and futur
The generic insight into existence which alone can defi
metaphysics in any empirically intelligible sense is itse
an added fact of interaction, and is therefore subject

the same requirement of intelligence as any other natural occurrence: namely, inquiry into the bearings, leadings and consequences of what it discovers. The universe is no infinite self-representative series, if only because the addition within it of a representation makes it a different universe.

By an indirect path we are brought to a consideration of the most far-reaching question of all criticism: the relationship between existence and value, or as the problem is often put, between the real and ideal.

Philosophies have usually insisted upon a wholesale relationship. Either the goods which we most prize and which are therefore termed ideal are identified completely and throughout with real Being; or the realms of existence and of the ideal are wholly severed from each other. In the European tradition in its orthodox form the former alternative has prevailed. *Ens* and *verum*, *bonum* are the same. Being, in the full sense, is perfection of power to be; the measure of degrees of perfection and of degrees of reality is extent of power. Evil and error are impotences; futile gestures against omnipotence—against Being. Spinoza restated to this effect medieval theology in terms of the new outlook of science. Modern professed idealisms have taught the same doctrine. After magnifying thought and the objects of thought, after magnifying the ideals of human aspiration, they have then sought to prove that after all these things are not ideal but are real—real not *as* meanings and ideals, but as existential being. Thus the assertion of faith in the ideal belies itself in the making; these "idealists" cannot trust their ideal till they have converted it into existence—that is, into the physical or the psychical, which, since it lacks the proper-

ties of the empirically physical and psycho-physica
becomes a peculiar kind of existence, called metaphysica

There are also philosophies, rarer in occurrence, whic
allege that the ideal is too sacredly ideal to have an
point of contact whatever with existence; they think tha
contact is contagion and contagion infection. At firs
sight such a view seems to display a certain nobility o
faith and fineness of abnegation. But an ideal realm
that has no roots in existence has no efficacy nor relevancy
It is a light which is darkness, for shining in the void i
illumines nothing and cannot reveal even itself. I
gives no instruction, for it cannot be translated into th
meaning and import of what actually happens, and henc
it is barren; it cannot mitigate the bleakness of existenc
nor modify its brutalities. It thus abnegates itself i
abjuring footing in natural events, and ceases to be ideal
to become whimsical fantasy or linguistic sophistication.

These remarks are made not so much by way of hostile
animadversion as by way of indicating the sterility o
wholesale conceptions of the relation of existence and
value. By negative implication, they reveal the only
kind of doctrine that can be effectively critical, taking
effect in discriminations which emancipate, extend, and
clarify. Such a theory will realize that the meanings
which are termed ideal as truly as those which are termed
sensuous are generated by existences; that as far as they
continue in being they are sustained by events; that they
are indications of the possibilities of existences, and are
therefore, to be used as well as enjoyed; used to inspire
action to procure and buttress their causal conditions.
Such a doctrine criticizes particular occurrences by the
particular meanings to which they give rise; it criticizes

also particular meanings and goods as their conditions are found to be sparse, accidental, incapable of conservation, or frequent, pliant, congruous, enduring; and as their consequences are found to afford enlightenment and direction in conduct, or to darken counsel, narrow the horizon of vision, befog judgment and distort perspective. A good is a good anyhow, but to reflection those goods approve themselves, whether labelled beauty or truth or righteousness, which steady, vitalize and expand judgments in creation of new goods and conservation of old goods. To common-sense this statement is a truism. If to philosophy it is a stumbling-block, it is because tradition in philosophy has set itself in stiff-necked fashion against discriminations within the realm of existences, on account of the pluralistic implications of discrimination. It insists upon having all or none; it cannot choose in favor of some existences and against others because of prior commitment to a dogma of perfect unity. Such distinctions as it makes are therefore always hierarchical; degrees of greater and less, superior and inferior, in one homogeneous order.

I gladly borrow the glowing words of one of our greatest American philosophers; with their poetry they may succeed in conveying where dry prose fails. Justice Holmes has written: "The mode in which the inevitable comes to pass is through effort. Consciously or unconsciously we all strive to make the kind of world that we like. And although with Spinoza we may regard criticism of the past as futile, there is every reason for doing all that we can to make a future such as we desire." He then goes on to say, "there is every reason also for trying to make our desires intelligent. The trouble is that our

ideals for the most part are inarticulate, and that even i we have made them definite we have very little experi mental knowledge of the way to bring them about. And this effort to make our desires, our strivings and ou ideals, (which are as natural to man as his aches and hi clothes) articulate, to define them (not in themselve which is impossible) in terms of inquiry into condition and consequences is what I have called criticism; and whe carried on in the grand manner, philosophy. In a furthe essay, Justice Holmes touches upon the relation of philos ophy (thus conceived) to our scientific and metaphysica insight into the kind of a world in which we live.

"When we come to our attitude toward the universe do not see any rational ground for demanding the super lative for being dissatisfied unless we are assured that ou truth is cosmic truth, if there is such a thing. . . . . If a man sees no reason for believing that significance consciousness and ideals are more than marks of th human, that does not justify what has been familiar i French sceptics; getting upon a pedestal and professin to look with haughty scorn upon a world in ruins. Th real conclusion is that the part cannot swallow the whole . . . . . If we believe that we came out of the uni verse, not it out of us, we must admit that we do not know what we are talking about when we speak of brute matter We do know that a certain complex of energies can wa its tail and another can make syllogisms. These ar among the powers of the unknown, and if, as may be, i has still greater powers that we cannot understan . . . . . why should we not be content? Why shoul we employ the energy that is furnished to us by the cos mos to defy it and to shake our fist at the sky? It seem to me silly."

"That the universe has in it more than we understand, that the private soldiers have not been told the plan of campaign, or even that there is one . . . . has no bearing on our conduct. We still shall fight—all of us because we want to live, some, at least, because we want to realize our spontaneity and prove our powers, for the joy of it, and we may leave to the unknown the supposed final valuation of that which in any event has value to us. It is enough for us that the universe has produced us and has within it, as less than it, all that we believe and love. If we think of our existence not as that of a little god outside, but as that of a ganglion within, we have the infinite behind us. It gives us our only but our adequate significance. If our imagination is strong enough to accept the vision of ourselves as parts inseparable from the rest, and to extend our final interest beyond the boundary of our skins, it justifies even the sacrifice of our lives for ends outside of ourselves. The motive to be sure is the common wants and ideals that we find in man. Philosophy does not furnish motives, but it shows men that they are not fools for doing what they already want to do. It opens to the forlorn hopes on which we throw ourselves away, the vista of the farthest stretch of human thought, the chord of a harmony that breathes from the unknown."

Men move between extremes. They conceive of themselves as gods, or feign a powerful and cunning god as an ally who bends the world to do their bidding and meet their wishes. Disillusionized, they disown the world that disappoints them; and hugging ideals to themselves as their own possession, stand in haughty aloofness apart from the hard course of events that pays so little heed to

our hopes and aspirations. But a mind that has opened itself to experience and that has ripened through it discipline knows its own littleness and impotencies; i knows that its wishes and acknowledgments are not fina measures of the universe whether in knowledge or in con duct, and hence are, in the end, transient. But it also knows that its juvenile assumption of power and achieve ment is not a dream to be wholly forgotten. It implie a unity with the universe that is to be preserved. The belief, and the effort of thought and struggle which i inspires are also the doing of the universe, and they in some way, however slight, carry the universe forward. A chastened sense of our importance, apprehension tha it is not a yard-stick by which to measure the whole, is consistent with the belief that we and our endeavors are significant not only for themselves but in the whole.

Fidelity to the nature to which we belong, as parts however weak, demands that we cherish our desires and ideals till we have converted them into intelligence revised them in terms of the ways and means which nature makes possible. When we have used our thought to its utmost and have thrown into the moving unbalanced balance of things our puny strength, we know that though the universe slay us still we may trust, for our lot is one with whatever is good in existence. We know that such thought and effort is one condition of the coming into existence of the better. As far as we are concerned it is the only condition, for it alone is in our power. To ask more than this is childish; but to ask less is a recreance no less egotistic, involving no less a cutting of ourselves from the universe than does the expectation that it meet and satisfy our every wish. To ask in good faith as much

as this from ourselves is to stir into motion every capacity of imagination, and to exact from action every skill and bravery.

While, therefore, philosophy has its source not in any special impulse or staked-off section of experience, but in the entire human predicament, this human situation falls wholly within nature. It reflects the traits of nature; it gives indisputable evidence that in nature itself qualities and relations, individualities and uniformities, finalities and efficacies, contingencies and necessities are inextricably bound together. The harsh conflicts and the happy coincidences of this interpenetration make experience what it consciously is; their manifest apparition creates doubt, forces inquiry, exacts choice, and imposes liability for the choice which is made. Were there complete harmony in nature, life would be spontaneous efflorescence. If disharmony were not in both man and nature, if it were only between them, man would be the ruthless overlord of nature, or its querulous oppressed subject. It is precisely the peculiar intermixture of support and frustration of man by nature which constitutes experience. The standing antitheses of philosophic thought, purpose and mechanism, subject and object, necessity and freedom, mind and body, individual and general, are all of them attempts to formulate the fact that nature induces and partially sustains meanings and goods, and at critical junctures withdraws assistance and flouts its own creatures.

The striving of man for objects of imagination is a continuation of natural processes; it is something man has learned from the world in which he occurs, not something which he arbitrarily injects into that world. When he

adds perception and ideas to these endeavors, it is not after all he who adds; the addition is again the doing of nature and a further complication of its own domain. To act, to enjoy and suffer in consequence of action, to reflect, to discriminate and make differences in what had been but gross and homogeneous good and evil, according to what inquiry reveals of causes and effects; to act upon what has been learned, thereby to plunge into new and unconsidered predicaments, to test and revise what has been learned, to engage in new goods and evils is human, the course which manifests the course of nature. They are the manifest destiny of contingency, fulfillment, qualitative individualization and generic uniformities in nature. To note, register and define the constituent structure of nature is not then an affair neutral to the office of criticism. It is a preliminary outline of the field of criticism, whose chief import is to afford understanding of the necessity and nature of the office of intelligence.

If I mistake not, the actual animus of subjectivity in modern philosophy is not where its antagonists have placed it. Its actual animus and its obnoxious burden are exemplified in the doctrine of its hostile critics. For they assign to knowledge alone valid reference to existence. Desires, beliefs, "practical" activity, values are attributed exclusively to the human subject; this division is what makes subjectivity a snare and peril. The case of belief is crucial. For it is admitted that belief involves a phase of acquiescence or assertion, it presents qualities which involve *personal* factors; and (whatever definition of value be employed) value. A sharp line of demarcation has therefore to be drawn between belief and knowledge, for the latter has been defined in terms of pure objec

ivity. The need to control belief is admitted; knowledge igures, even though according to these theories only *per ccidens*, as the organon of such control. Practically hen, in effect, knowledge, science, truth, is the method of riticizing beliefs. It is the method of determining right articipation in beliefs on the part of personal factors. Why then keep up any other distinction between knowl-dge and beliefs, save that between methodical agencies, fficacious instrumentalities, and the accepted objects which being conclusions, are hence marked by characters lue to the method of their production, in contrast with bjects of belief blindly and accidentally generated? Why perturbation at the intimation that science is inher-ntly an instrument of critically determining what is good and bad in the way of acceptance and rejection?

I can see but one answer. The realm of desire, belief, earch, choice is thought of as "subjective" in a sense which isolates it from natural existence and which makes t an inexplicable irruption. This is the reason for sharp eparation of belief and knowledge. Aversion to making cience a means of determining the right operation of per-onal factors, just as the technical and material apparatus f a painter determines his product, is well grounded if he personal is outside of nature. Made a means to omething personal conceived in this sense, science loses ts objectivity, and becomes infected with the traits which characterize the merely private and arbitrary.

There is involved, however, in the conclusion an unex-mined and uncriticized assumption. The reason for solating doubt, striving, purpose, the variegated colored lay of goods and bads, rejections and acceptances, is hey do not belong in the block universe which forms the

object of generalized knowledge, whether the block b conceived as mechanical or as rational in structure. Th argument thus moves in a vicious circle; the question i begged at the outset. If individualized qualities, statu arrests, limiting "ends," and contingent changes charac terize nature, then they manifest themselves in the uses enjoyments and sufferings, the searchings and striving which form conscious experience. These are as realistic as "objectively" natural, as are the constituents of th object of cognitional experience. There is then no groun for denying or evading the full import of the fact that th latter are the means and the only means of regulativ appraisals of values, of their revision, rectification, o their regulated generation and fortification.

The habitual avoidance in theories of knowledge of an reference to the fact that knowledge is a case of belief operates as a device for ignoring the monstrous conse quences of regarding the latter as existentially subjective personal and private. No such device is available i dealing with esthetic and moral goods. Here the obnoxi ous one-sided conception operates in full force. Th usual current procedure is to link values with likings a merely personal affairs, ignoring the inconvenient fac that the theory logically thereby makes all *beliefs* als matters of arbitrary, undiscussable preference. It is n cause for wonder therefore that there is next to no consen sus in esthetic and moral theories. Since their subject matter is totally segregated from that of science, sinc they are assigned to independent non-participating realm of existence, the only possible method of achieving agree ment has been exiled in advance.

Practically this consequence is intolerable; accordingly is rarely faced. "Standards" of value suddenly make heir appearance to serve as criteria of taste and conience. The distinction between likings and that which worth liking, between the desired and the desirable, etween the is and the ought, descends out of the blue. here are, it seems, immediate values, but there also are tandard values, and the latter may be used to judge and easure immediate goods and bads. Thus the reflective istinction between the true and the false, the genuine and he spurious is brought upon the scene. In strict logic, owever, it enters only to disappear. For if the standard itself a value, then it is by definition only another name r the object of a particular liking, on the part of some articular subjective creature. If the liking for it conicts with some other liking, the strongest wins. There is o question of false and true, of real and seeming, but only stronger and weaker. The question of which one *ould* be stronger is as meaningless as it would be in a ock-fight.

Such a conclusion puts an end to all attempt at consistency and organization and calls out in reaction an pposite theory. The "standard" is not, it is decided, r us at least, a good. It is rather a principle rationally prehended. It is that which is "right" rather than hat which is good; and since it is the right, it is the standrd for judging all goods. If right is also good, the identication subsists in some transcendental realm; in some ernal, non-empirical realm of Being which is also a alm of values. The standard of good thus conceived as principle of reason and as a form of supreme Being, is t over against the outside of actual desires, striving,

satisfactions and frustrations. It ought to enter int
their determination but for the most part it does no
The distinction between is and ought is one of kind, an
a separation. It is not surprising that the wheel com
pletes a full circle, and that the finale is a retort that th
alleged standard is itself but another dignified disguis
for some one's arbitrary liking—the *ipse dixit* of some or
accidentally clothed with extraneous authority.

It is as irritating to have experience of beauty an
moral goodness reduced to groundless whims as to hav
that of truth. Common-sense has an inexpugnab
conviction that there are immediate goods of enjoymen
and conduct, and that there are principles by which the
may be appraised and rectified. Common-sense ente
tains this firm conviction because it is innocent of an
rigid demarcation between knowledge on one side an
belief, conduct and esthetic appreciation on the othe
It is guiltless of the division between objective realit
and subjective events. It takes striving, purposin
inquiring, wanting, the life of "practice," to be as muc
facts of nature as are the themes of scientific discours
to it, indeed, the former has a more direct and urgen
reality. Hence it has no difficulty with the idea of r
tional or objective criticism and rectification of immedia
goods. If it were articulate, it would say that the sam
natural processes which generate goods and evils genera
also the striving to secure the one and avoid the othe
and generate judgments to regulate the strivings. I
weakness is that it fails to recognize that deliberate an
systematized science is a precondition of adequate jud
ments and hence of adequate striving and adequate choic
Its organs of criticism are for the most part half-jud

ents, uncriticized products of custom, chance circum-
ance and vested interests. Hence commonsense when
begins to reflect upon its own convictions easily falls a
ctim to traditional theories; and the vicious circle begins
er again. It is sound as to the need and possibility of
jective criticism of values, it is weak as to the method of
ccomplishing.

Yet all this time there is an example of the way out in
e case of beliefs. There was a time when beliefs about
ternal events were largely matters of what it was
und immediately good to accept or reject; as far as there
as a distinction made between the immediately good in
lief and the real or true, it lay chiefly in the fact that the
tter was the object sanctioned by authorities of church
d state. Yet it is now all but commonplace that
ery belief-value must be subjected to criticism; in
ientific undertakings, it is a common-place that criticism
es not depend upon reference to a transcendent stand-
d truth. The distinction between an immediate
lief-value, which is but a challenge to inquiry, and an
entual object of belief that concludes critical inquiry,
d has the value of fulfilling the causal relationships
scovered, is made in the course of intelligent experi-
ent. The result is a distinction between the apparent
d the real good. Gradually a reluctant world is per-
aded that meanings so determined define what is good
r acceptance and assertion. Meantime beliefs deter-
ined by passion, class-interest, routine and authority
main sufficiently prevalent to enforce the perception
at it makes all the difference in the world in the value
a belief how its object is formed and arrived at. Thus
e lesson is enforced that critical valuations of immediate

goods proceed in terms of the generation and consequence of objects qualified with good.

In outward forms, experimental science is infinitely varied. In principle, it is simple. We know an object when we know how it is made, and we know how it is made in the degree in which we ourselves make it. Old tradition compels us to call thinking "mental." But "mental" thought is but partial experimentation, terminating in preliminary readjustments, confined within the organism. As long as thinking remained at this stage, it protected itself by regarding this introverted truncation as evidence of an immaterial reason superior to and independent of body. As long as thought was thus cooped up, overt action in the "outer" natural scene was inevitably shorn of its full meed of meaning; it was to that extent arbitrary and routine. When "outer" and "inner" activity came together in a single experimental operation, used as the only adequate method of discovery and proof, effective criticism, consistent and ordered valuation, emerged. Thought aligned itself with other arts that shape objects by informing things with meaning.

Psychology, which reflects the old dualistic separation of mind from nature, has made current the notion that the processes which terminate in knowledge fare forth from innocent sensory data, or from pure logical principles, or from both together, as original starting point and material. As a natural history of mind this notion is wholly mythological. All knowing and effort to know starts from some belief, some received and asserted meaning which is a deposit of prior experience, personal and communal. In every instance, from passing query to elaborate scientific undertaking, the art of knowing criti

zes a belief which has passed current as genuine coin, ith a view to its revision. It terminates when freer, richer nd more secure objects of belief are instituted as goods f immediate acceptance. The operation is one of doing nd making in the literal sense. Starting from one good, eated as apparent and questionable, and ending in nother which is tested and substantiated, the final act f knowing is acceptance and intellectual appreciation f what is significantly conclusive.

Is there any reason for supposing that the situation is ny different in the case of other values and valuations? there any intrinsic difference between the relation of ientific inquiry to belief-values, of esthetic criticism to sthetic values, and of moral judgments to moral goods? there any difference in logical method? If we adopt a rrent theory, and say that immediate values occur where ver there is liking, interest, bias, it is clear that this king is an act, if not an overt one, at least a dispositional ndency and direction. But most likings, all likings in heir first appearance, are blind and gross. They do not now what they are about nor why they attach themlves to this or that object. Moreover, every such act kes a risk and assumes a liability, and does so ignorantly. or there are always in existence rival claimants for likg. To prefer *this* is to exclude *that*. Any liking is hoice, unwittingly performed. There is no selection ithout rejection; interest and bias are selective, preferenal. To take this for a good is to declare in act, though ot at first in thought, that it is better than something se. This decision is arbitrary, capricious, unreasoned ecause made without thought of the other object, nd without comparison. To say that an object is a

good may seem to be an absolute and intrinsic declaratio
particularly when the assertion is made in direct a
rather than in thought. But when we recognize that
effect the assertion is that one thing is better than anoth
thing, the issues shift to something comparative, rel
tional, causal, intellectual and objective. *Immediate*
nothing is better or worse than anything else; it is ju
what it is. Comparison is comparison of things, thin
in their efficacies, their promotions and hindrances. T
better is that which will do more in the way of securit
liberation and fecundity for other likings and values.

To make a valuation, to judge appraisingly, is then
bring to conscious perception relations of productivity a
resistance and thus to make value significant, intellige
and intelligible. In becoming discriminately aware
the causal conditions of the object liked and preferre
we become aware of its eventual operations. If in t
case of esthetic and moral goods, the causal conditio
which reflection reveals as determinants of the good obje
are found to lie within organic constitution in great
degree than is the case with objects of belief, this finding
of enormous importance for the technique of critic
judgment. But it does not modify the logic which obtai
in knowledge of the relationship of values and valuatio
to each other. It indicates the particular subject-matt
which has to be controlled and used in the conscious a
of re-making goods. As inquiries which aim at knowled
start from pre-existent beliefs, so esthetic and mo
criticism start from antecedent natural goods of conte
plative enjoyment and social intercourse. Its purpose is
make it possible to like and choose knowingly and wi
meaning, instead of blindly. All criticism worthy of t

title is but another name for that revealing discovery of conditions and consequences which enables liking, bias, interest to express themselves in responsible and informed ways instead of ignorantly and fatalistically.

The meaning of the theory advanced concerning the relationship of goods and criticism may be illustrated by ethical theory. Few I suppose would deny that in spite of the attention devoted to this subject by many minds of a high order of intention and intellectual equipment, the outcome, judged from the standpoint of scientific consensus, is rather dismaying. The outcome is due in part to the importance of the subject, its intimate connection with man's deepest concerns, with his most cherished traditions and with the most acutely perplexing problems of his contemporary social life. Objective detachment and development of adequate intellectual instruments are necessarily difficult under such conditions. But I think that we find, amid all the diversity, one common intellectual preconception which inevitably defers the possibility of attainment of scientific method. This is the assumption, implicit or overt, that moral theory is concerned with ends, values rather than with criticism of ends and values; the latter being in fact not only independent of moral theory but not themselves having even moral quality. To discover and define once for all the *bonum* and the *summum bonum* in a way which rationally subserves all virtues and duties, is the traditional task of morals; to deny that moral theory has any such office will seem to many equivalent to denial of the possibility of moral philosophy. Yet in other things repeated failure of achievement is regarded as evidence that we going at the affair in a wrong way. And to a mind willing to surrender the traditional preconception,

failure to achieve consensus in method and even generic conclusions in morals as a branch of philosophy may be similarly explained.

It is not meant of course that the tradition assumes that the good and the highest good are created by moral theory. The assumption is not so bad as that; it is to the effect that it is the province of moral theory to reveal moral goods; to bring them to consciousness and to enforce their character in perception. As empirical fact, however, the arts, those of converse and the literary arts which are the enhanced continuations of social converse, have been the means by which goods are brought home to human perception. The writings of moralists have been efficacious in this direction upon the whole not in their professed intent as theoretical doctrines, but in as far as they have genially participated in the arts of poetry, fiction, parable and drama. Conversion into doctrinal teachings of the imaginative relations of life with which great moral artists have dowered humanity has been the great cause of their ossification into harsh dogmas; illumination insight into the relations and goods of life has been lost and an arbitrary code of precepts and rules substituted. Direct appeal of experience concentrated, vivified and intensified by the insight of an artist and embodied in literary creations similar in kind to the revelation of meanings which is the work of any artist, has been treated as a discovery and definition of things true by scientific or philosophic reason.

Meantime the work which theoretical criticism might do has not been done; namely, discovery of the conditions and consequences, the existential relations, of goods which are accepted as goods not because of theory but

because they are such in experience. The cause in large measure is doubtless because the prerequisite tools of physics, physiology and economics were not at hand. But now when these potential instrumentalities are more adequately prepared they will not be employed until it is recognized that the business of moral theory is not at all with consummations and goods as such, but with discovery of the conditions and consequences of their appearance, a work which is factual and analytic, not dialectic, hortatory, nor prescriptive. The argument does not forget that there have been would-be naturalistic and empirical ethics which have asserted that goods are such prior to moral conduct as well as to moral theory, and that they become moral only when employed in conduct as objects of reflective choice and endeavor. But the apparent exception proves the rule. For these forms of moral theory while releasing morals from the obligation of telling man what goods are, leaving that office to life itself, have failed to note that the office of moral philosophy is criticism; and that the performance of this office by discovery of existential conditions and consequences involves a qualitative transformation, a re-making in subsequent action which experimentally tests the conclusions of theory.

Therefore like the Aristotelian ethics, they have been dialectic, defining and classifying in hierarchical order antecedent goods and terminating in a notion of *the* good, the *summum bonum;* or, like hedonistic ethics, they have made a dialectic abstraction of a feature of concrete goods, their pleasantness; and instead of providing a method of analysis of concrete situations have laid down rules of calculation and prescribed policies to

be pursued as fixed, not intellectually experimenta
results of prior calculations. When they were, lik
Jeremy Bentham, persons of human sensitiveness to evi
from which men suffer in virtue of institutions which ma
be altered; or, like John Stuart Mill, of genial insight int
the constituents of a liberal and humane happiness, the
have stirred their generation to beneficent action. Bu
the connection between their theories and the practica
outcome was adventitious; their ideas operated whe
all is said and done as literary rather than as scientifi
apparatus, as much so as in the case of reforms to whic
Charles Dickens not meanly contributed.

The implications of the position which has been take
import a "practical" element into philosophy as effectiv
and verifiable criticism, obnoxious to the traditional view
Yet if man is within nature, not a little god outside, an
is within as a mode of energy inseparably connected wit
other modes, interaction is the one unescapable trait o
every human concern; thinking, even philosophic think
ing, is not exempt. This interaction is subject to par
tiality because the human factor has bent and bias. Bu
partiality is not obnoxious just because it is partial.
world characterized by qualitative histories with thei
own beginnings, directions and terminations is of neces
sity a world in which any interaction is intensive change—
a world of partialities, particulars. What is obnoxious i
partiality is due to the illusion that there are states an
acts which are not also interactions. Immature an
undisciplined mind believes in actions which have thei
seat and source in a particular and separate being, fro
which they issue. This is the very belief which the ad
vance of intelligent criticism destroys. The latter trans

forms the notion of isolated one-sided acts into acknowledged interactions. The view which isolates knowledge, contemplation, liking, interest, value, or whatever from action is itself a survival of the notion that there are things which can exist and be known apart from active connection with other things.

When man finds he is not a little god in his active powers and accomplishments, he retains his former conceit by hugging to his bosom the notion that nevertheless in some realm, be it knowledge or esthetic contemplation, he is still outside of and detached from the ongoing sweep of inter-acting and changing events; and being there alone and irresponsible save to himself, is as a god. When he perceives clearly and adequately that he is within nature, a part of its interactions, he sees that the line to be drawn is not between action and thought, or action and appreciation, but between blind, slavish, meaningless action and action that is free, significant, directed and responsible. Knowledge, like the growth of a plant and the movement of the earth, is a mode of interaction; but it is a mode which renders other modes luminous, important, valuable, capable of direction, causes being translated into means and effects into consequences.

All reason which is itself reasoned, is thus method, not substance; operative, not "end in itself." To imagine it the latter is to transport it outside the natural world, to convert it into a god, whether a big and original one or a little and derived one, outside of the contingencies of existence and untouched by its vicissitudes. This is the meaning of the "reason" which is alleged to envisage reality *sub specie eternatatis*. It is indeed true that all relations, all universals and laws as such are timeless.

Even an order of time as an order is timeless, for it is relational. But to give irrelevancy to time the name of eternal in an eulogistic sense, is but to proclaim that irrelevancy to any existence forms a higher kind of existence. Orders, relations, universals are significant and invaluable as objects of knowledge. They are so because they apply to intensive and extensive, individualized, existences; to things of spacious and temporal qualities. Application is not for the sake of something extraneous, for the sake of something designated an utility. It is for the sake of the laws, principles, ideals. Had they not been detached for the purpose of application, they would not have meaning; intent and potentiality of application in the course of events lends them all their significance. Without *actuality* of application, without effort to realise their intent, they are meanings, but they possess neither truth nor falsity, since without application they have no bearing and test. Thus they cease to be objects of knowledge, or even reflection; and become detached objects of contemplation. They may then have the esthetic value possessed by the objects of a dream. But after all we have not left temporal experience, human desire, liking, and passion behind or below us. We have merely painted nature with the colors of an all too local and transitory flight from the hardships of life. These eternal objects abstracted from the course of events, although labeled Reality, in opposition to Appearance, are in truth but the idlest and most evanescent of appearances, born of personal craving and shaped by private fantasy.

Because intelligence is critical method applied to goods of belief, appreciation and conduct, so as to construct freer and more secure goods, turning assent and assertion

into free communication of shareable meanings, turning feeling into ordered and liberal sense, turning reaction into response, it is the reasonable object of our deepest faith and loyalty, the stay and support of all reasonable hopes. To utter such a statement is not to indulge in romantic idealization. It is not to assert that intelligence will ever dominate the course of events; it is not even to imply that it will save from ruin and destruction. The issue is one of choice, and choice is always a question of alternatives. What the method of intelligence, thoughtful valuation will accomplish, if once it be tried, is for the result of trial to determine. Since it is relative to the intersection in existence of hazard and rule, of contingency and order, faith in a wholesale and final triumph is fantastic. But some procedure has to be tried; for life is itself a sequence of trials. Carelessness and routine, Olympian aloofness, secluded contemplation are themselves choices. To claim that intelligence is a better method than its alternatives, authority, imitation, caprice and ignorance, prejudice and passion, is hardly an excessive claim. These procedures have been tried and have worked their will. The result is not such as to make it clear that the method of intelligence, the use of science is criticizing and recreating the casual goods of nature into intentional and conclusive goods of art, the union of knowledge and values in production, is not worth trying. There may be those to whom it is treason to think of philosophy as the critical method of developing methods of criticism. But this conception of philosophy also waits to be tried, and the trial which shall approve or condemn lies in the eventual issue. The import of such knowledge as we have acquired and such experience as has been quickened by thought is to evoke and justify the trial.

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